

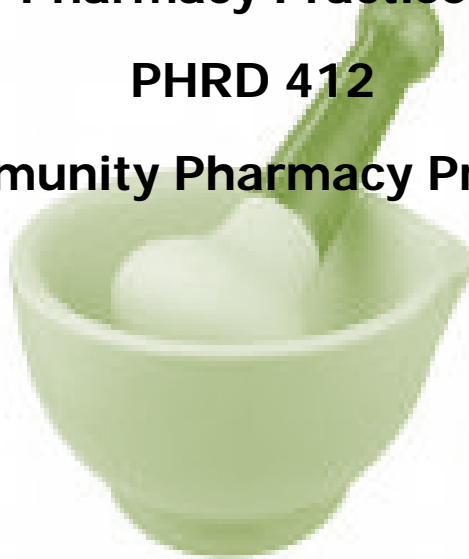
NOTRE DAME
OF MARYLAND
UNIVERSITY

SCHOOL OF PHARMACY

Introductory Pharmacy Practice Experience II

PHRD 412

Community Pharmacy Practice



Course Manual
2017 - 2018

Educating Students...



...Creating Partnerships

Section One

School of Pharmacy Vision, Mission, and Values

Office of Experiential Education Mission

School of Pharmacy Vision

To provide exceptional pharmacy education by creating a model learning community dedicated to the transformation of societal health.

School of Pharmacy Mission

We educate student pharmacists to be compassionate, ethical professionals who improve medication use and provide quality patient care to a diverse population. We develop leaders and advance public health.

Our Values

The faculty, staff and student pharmacists pledge to work together to achieve our vision and mission in an environment that lives by and embraces the following values:

- Altruism
- Collaboration
- Excellence
- Innovation
- Integrity

Office of Experiential Education Mission

The Office of Experiential Education (OEE) at Notre Dame of Maryland University, School of Pharmacy is committed to student learning and pharmacy practice in an environment that embodies quality, values partnerships, and fosters collaboration. Our mission is to provide students with diverse and challenging Introductory and Advanced Pharmacy Practice Experiences that will prepare them to be successful practitioners in any practice setting.

Office of Experiential Education
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Section Two

Preceptor and Student Guidelines

Suggested Schedule Template

IPPE Calendar

Preceptor and Student Guidelines

1. Expectations of Students

Students are required to read **all** sections of the Course Manual prior to the start of the rotation. Policies regarding professionalism, professional dress, confidentiality, etc. are clearly stated in the course manual. Students are expected to read these policies and act professional at all times during the rotation. It is important to recognize the pharmacist preceptor is busy and taking the time to help the students learn and succeed. It is imperative that the students be patient, appreciative of their support and time, and respectful of the confidentiality of patient and site information. Students should be assertive and ask for assistance when needed. Students should be proactive and always try to stay one step ahead.

Preceptors may require students to sign confidentiality statements if required by the institution. Students who do not abide by the General Course Guidelines must be informed by the preceptor of their shortfalls, and recommendations for improvement should be provided. If problems continue to occur with the student despite prior warnings, the preceptor should contact the Office of Experiential Education (OEE).

2. Rotation Variability

The sites to which students are assigned will vary somewhat in the type of experience they can provide. Each student will find his/her rotation experience may vary slightly from students at other sites. However, in order to ensure the same learning outcomes are achieved by all students, a standard set of learning objectives and activities, and method of evaluation will be utilized by all preceptors. As such, if a site cannot accommodate a standard learning activity, the preceptor may substitute another relevant activity/assignment.

The Course Manual provides a suggested schedule for the completion of activities. Preceptors may, however, modify this in order to accommodate their own practice environment. Preceptors may also **add** activities, experiences, and/or reading assignments that will be beneficial to students. These will be in addition to the time the student should be at the site and also may include deviation from the on-site hours which can occur anytime between 8:00 a.m. - 12:00 p.m., as long as it does

not interfere with times students are required to be on campus for classes. For your reference, students' next class Mondays, Wednesdays, and Fridays begins at 1:00pm in the fall and may begin at 12:00pm in the spring if they choose an elective course beginning at that time.

Due to site variability, *preceptors may modify activities as appropriate* or assign additional activities. These activities should be documented in the appropriate section of the competency assessment form.

3. Grading and Feedback

It is important that students regularly be given timely and constructive feedback by preceptors. Feedback from preceptors can be both informal and formal. Informal feedback would include comments or suggestions made after a discussion, activity, or during the course of the rotation. Formal evaluations must include the mid-rotation and final student assessments. These evaluations are essential to the student. The mid-rotation evaluation is a valuable tool for students to receive concrete ways to improve their performance. In addition, for areas in which the student is doing well, it is a motivational tool and words of encouragement. Students are required to complete self-evaluations of the professionalism and competency assessments at the midpoint and end of the rotation. **Preceptors are strongly encouraged to provide a student's evaluation on or before the last day of the IPPE.**

Please note that the student MUST earn a mean score of 2.5 or above (and no individual criteria score below a 2.0) on this competency assessment in order to PASS the rotation. Comments must be made for a final mean score of < 3.0 in order for the evaluation to be submitted through E-value. It is imperative for students to receive feedback as to what areas they need to improve upon as they progress through the experiential program. Comments are much more useful than numbers to students in helping them improve their performance.

4. Attendance

Students are required to be at their sites for 2 weeks full-time (80 hours) at the beginning of the rotation and 3 hours per week thereafter for the remainder of the

semester. Preceptors will sign off that students have completed the required number of hours on the midpoint and final professionalism evaluation forms. All missed time must be made up except when the university is closed due to inclement weather.

Students may not miss IPPE hours to prepare for an exam; however, if a preceptor feels it is in the best interest of the student, they may allow the student to change the day of the IPPE rotation the week of the exam. Preceptors may also modify a student's day at the IPPE site based on their schedule and should notify the students at least one week in advance of any schedule changes.

5. Activities

Refer to the manual for a list of activities students must complete throughout the rotation. Some activities should be completed during the two-week full-time at the beginning of each rotation and others are either weekly or longitudinal activities. Weekly activities are those that can be completed at any point during the rotation (please see the suggested scheduling of topics), but should be completed in one 3-hour time period at the site. Longitudinal activities are those activities that should be worked on throughout the rotation and will likely need several weeks to complete. Students should complete portions of these activities at various times throughout the rotation until complete. Students are to work with the preceptor to determine a timeline for completing longitudinal activities. Each activity's learning objectives help students to focus on the desired learning outcomes. If an activity is not available at a site, students must still complete the activity through preceptor discussion, research, or reading to fully comprehend the material and/or topic. Students are expected to routinely upload activities to E-Value. Students must add their preceptor as a supervisor as soon as possible to each activity in E-Value to allow viewing ability. All activities will be reviewed and signed off in E-Value by preceptors that they have been accurately completed. **Students are responsible for uploading their activities before the last day of their IPPE rotation.**

6. Preceptor and Student Support

In addition to this manual, the OEE is available to answer questions regarding the student, preceptor, or rotation. The goal of the OEE is to support the delivery of quality experiences for students and preceptors. If you have any questions or concerns, please do not hesitate to contact the OEE. Preceptor participation in the education of our students is greatly appreciated!

Suggested Schedule Template

Suggested timeframe	Activity	Worksheet #	Special Notes
Full-time 2-week period activities			
	Orientation (no specific worksheet provided)		Includes getting to know the student (can review CV on E*Value), meeting with the preceptor and pharmacy team, discussion of expectations for rotation and professionalism
	Prescription Processing	1	Shadowing and assisting a pharmacy technician
	Medication List	2	Preceptor to help student identify 25 fast-mover medications at the pharmacy
	Pharmacy Management	3	Includes pharmacy mission, policies, personnel requirements, customer service issues
	Pharmacy Operations	4	Includes inventory management, medication storage, and security
	Drug Information	5	Assignment is focused on drug information resources and the drug information process at the pharmacy. Student and preceptor to develop a list of potential questions throughout rotation; Student to document DI question response on the template provided.
	Medication Safety and Regulatory Agencies	6	Focus is on medication errors, adverse events, and regulatory agencies; student will need to do outside preparation to complete this activity (Mock pharmacy audit may extend beyond initial 2 week period)
Activities (suggested to be completed during one site visit during the block of time listed below)			
Week 1-5:	Cultural Awareness	7	Students will need to review Kleinman explanatory model of illness
	Health Literacy	8	Students will need to become familiar with health literacy tools (website provided on activity) and conduct assessment on themselves and a patient
	Professionalism, Ethics, and Communication	9	Requires students to make some observations and understand issues surrounding prescription processing before completion
	Durable Medical	10	Discussion with students regarding types

	Equipment		of DME sold in the pharmacy and billing processes
Week 6-10:	OTC Consult	11	Shadow preceptor conducting OTC consult prior to allowing student to conduct
	OTC Comparison	12	Requires students to go down the aisles comparing and contrasting products within specific OTC categories and alternative products
	Health Promotion and Wellness	13	Requires discussion with students regarding population of pharmacy and surrounding community; planning and conducting of wellness event– this will take time
	Compounding	14	Student to compound 2 medications if possible – may span several weeks
Week 11-15:	MTM Review	15	Student and preceptor/technician to develop a list of calculations to perform from prescription orders
	Patient Counseling	16	Shadowing a pharmacist before the student performs the counseling; will need to do counseling in the presence of the preceptor or other health care provider – utilize criteria for patient interview

*****NOTE*****

- This is a suggested schedule template for the rotation. If the preceptor chooses to not follow this template, the activities are linked to a worksheet number and can be moved to anytime the preceptor feels would be most appropriate for completion.
- Preceptors have the freedom to assign other activities/assignments for the students that they feel will enhance their learning and understanding of and contribution to health-system pharmacy.

Community IPPE Calendar

Fall 2017: August 7th – December 1st

Week	Location	Activity
August 7-18	Site Two-week, full-time M-F (80 hours)	Key concepts/observations; questions for further exploration Worksheets 1-6 during full-time hours
Week 1: August 21	Site (Request informal feedback from preceptor)	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 2: August 28	Site	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 3: September 4	Site <u>Wednesday and Friday groups</u> (Monday off – Labor Day)	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 4: September 11	Site - Midpoint Evaluation On-campus discussion (September 11 – Community September 12 – Health System*)	On Campus Discussion Read questions in on-campus discussion chart for September 11 and be prepared to discuss them all
Week 5: September 18	Site	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 6: September 25	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 7: October 2	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 8: October 9	Site, On-campus discussion (October 09 – Community October 10 – Health System*)	On Campus Discussion Read questions in on-campus discussion chart for October 9 and be prepared to discuss them all
Week 9: October 16	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 10: October 23	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 11: October 30	Site	Key concepts/observations; questions for further exploration Worksheets 15-16 in weeks 11-15
Week 12: November 6	Site	Key concepts/observations; questions for further exploration Worksheets 15-16 in weeks 11-15
Week 13: November 13	Site, On-campus discussion (November 13 – Community November 14 – Health System*)	On Campus Discussion Read questions in on-campus discussion chart for November 13 and be prepared to discuss them all
Week 14: November 20	Site <u>Only Monday group</u> Wednesday and Friday groups off – Thanksgiving Holiday	<u>Final Guided Reflection (See Guidelines and Rubric in Section 5)</u>
Week 15: November 27	Site - Final Evaluation Final guided reflection and <u>all</u> worksheets must be uploaded to E-Value by 8: 00 am on <i>your</i> last assigned day of IPPE rotations (November 27-M, 29-W, or December 1-F)	

* Report to KSC 105 (3:00 pm – 5:00 pm) **Attendance is Mandatory**

Community On-Campus Discussion Questions

September 11, 2017	October 9, 2017	November 13, 2017
<ul style="list-style-type: none"> ● Opportunity to discuss/share Community Pharmacy Settings: <ul style="list-style-type: none"> ○ What type of community pharmacy are you at? (e.g. chain, independent) ○ How many pharmacists are employed by the pharmacy? ○ How many Full-time? Part-time? ○ On an average day, how many technicians are working in the pharmacy? ○ Does your pharmacy have a drive-thru window? ○ How many prescriptions does it fill per week? ○ What surprises you about the jobs of the pharmacist? ○ What surprises you about the setting of the pharmacy (i.e., location, products/services sold, etc.)? ○ What are the pharmacist's day to day responsibilities? ○ What is the pharmacist's day to day schedule? ○ What do they like about their job? ● Impact on Direct Patient Care Perception <ul style="list-style-type: none"> ○ How much interaction does the pharmacist have with patients? ○ How often does the pharmacist provide a consultation? <ul style="list-style-type: none"> ○ How often is the pharmacist asked drug-related questions? (Rx, OTC, herbs, vitamins) 	<ul style="list-style-type: none"> ● Community Pharmacy Ethics <ul style="list-style-type: none"> ○ Have you seen a pharmacist do something that you do not agree with? Why do you think they chose to do so? ○ How do you feel about turning away controlled prescriptions for various reasons? ○ Is it okay to not fill a controlled substance prescription? If so, when? ○ Where do pharmacies refer their patients when they refuse to fill a prescription? ○ Have you seen a fake prescription? ○ How did the pharmacist/pharmacy handle the fake prescription? ● Community Pharmacy Workflow and Operations <ul style="list-style-type: none"> ○ How does the pharmacy handle drug shortages? ○ What do you think about prior authorizations (PA's)? ○ How do PA's affect the pharmacy workflow? ○ What else can back up the workflow of a pharmacy? ○ What is the main method of community that a pharmacist/pharmacy has with providers? Insurance companies? ○ What is the patient's expectation of the pharmacist? Provider? ○ What are the relationships between the pharmacy staff and the providers with which they communicate for their patients? 	<ul style="list-style-type: none"> ● Advanced Services in Community Pharmacy and Pharmacy Laws <ul style="list-style-type: none"> ○ Does your pharmacy bill for patient care services? ○ What do you see as needed education to provide all of these services? ○ Have you seen a pharmacist administering immunizations? Which vaccinations? ○ What types of influenza vaccines are being administered? ○ What is the youngest person you've seen receive a vaccination? Oldest? ○ Have you seen an MTM consult? ○ What difficulties have you encountered concerning the laws and regulations around e-prescribing? ○ What experiences have you encountered concerning the controlled prescription drug database? <p>Overall IPPE Experience Discussion</p>

Community IPPE Calendar

Spring 2018: January 2nd – April 27th

Week	Location	Activity
January 2-10	Site Two-week, full-time M-F (80 hours)	Key concepts/observations; questions for further exploration Worksheets 1-6 during full-time hours
Week 1: January 10	Site <u>Monday and Friday</u> (Wednesday off – first day of classes follow a Monday Schedule and begin the longitudinal portion)	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 2: January 15	Site (Must attend on MLK Day to complete IPPE hours**)	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 3: January 22	Site, On-campus discussion (January 22 – Community January 23 – Health System*)	On Campus Discussion In preparation, read questions in on-campus discussion chart for January 22 and be prepared to discuss them all
Week 4: January 29	Site	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 5: February 5	Site	Key concepts/observations; questions for further exploration Worksheets 7-10 in weeks 1-5
Week 6: February 12	Site - Midpoint Evaluation	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 7: February 19	Site, On-campus discussion (February 19 – Community February 20 – Health System*)	On Campus Discussion In preparation, read questions in on-campus discussion chart for February 19 and be prepared to discuss them all
Week 8: February 26	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 9: March 5	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 10: March 12	Site	Key concepts/observations; questions for further exploration Worksheets 11-14 in weeks 6-10
Week 11: March 19	Site, On-campus discussion (March 19 – Community March 20 – Health System*)	On Campus Discussion In preparation, read questions in on-campus discussion chart for March 19 and be prepared to discuss them all
Week 12: Mar 26	Spring Break – NO IPPE	
Week 13: April 2	Site <u>Wednesday and Friday</u> (Monday off – Easter)	Key concepts/observations; questions for further exploration Worksheets 15-16 in weeks 11-15
Week 14: April 9	Site	Key concepts/observations; questions for further exploration Worksheets 15-16 in weeks 11-15
Week 15: April 16	Site	Key concepts/observations; questions for further exploration Worksheets 15-16 in weeks 11-15 FRIDAY: Final Guided Reflection (See Guidelines and Rubric in Section 5)
Week 16: April 23	Site (Friday off – last day of classes follow a Monday Schedule)	Final Guided Reflection (See Guidelines and Rubric in Section 5)
Week 16: April 23	Site - Final Evaluation Final guided reflection and <u>all</u> worksheets must be uploaded to E-Value by 8:00 am on <i>your</i> last assigned day of IPPE rotations (April 20-F, 25-W, or 27-M)	

* Report to KSC 105 (3:00 pm – 5:00 pm) **Attendance is Mandatory**

** To complete the initial 80 IPPE hours required for the semester, students must attend the rotation site for Seven, 9-hour days, plus MLK day (8 hours required this year) plus one (1) weekend (Saturday and Sunday)

Community On-Campus Discussion Questions

January 22, 2018	February 19, 2018	March 19, 2018
<ul style="list-style-type: none"> ● Opportunity to discuss/share Community Pharmacy Settings: <ul style="list-style-type: none"> ○ What type of community pharmacy are you at? (e.g. chain, independent) ○ How many pharmacists are employed by the pharmacy? ○ How many Full-time? Part-time? ○ On an average day, how many technicians are working in the pharmacy? ○ Does your pharmacy have a drive-thru window? ○ How many prescriptions does it fill per week? ○ What surprises you about the jobs of the pharmacist? ○ What surprises you about the setting of the pharmacy (i.e., location, products/services sold, etc.)? ○ What are the pharmacist's day to day responsibilities? ○ What is the pharmacist's day to day schedule? ○ What do they like about their job? ● Impact on Direct Patient Care Perception <ul style="list-style-type: none"> ○ How much interaction does the pharmacist have with patients? ○ How often does the pharmacist provide a consultation? <ul style="list-style-type: none"> ○ How often is the pharmacist asked drug-related questions? (Rx, OTC, herbs, vitamins) 	<ul style="list-style-type: none"> ● Community Pharmacy Ethics <ul style="list-style-type: none"> ○ Have you seen a pharmacist do something that you do not agree with? Why do you think they chose to do so? ○ How do you feel about turning away controlled prescriptions for various reasons? ○ Is it okay to not fill a controlled substance prescription? If so, when? ○ Where do pharmacies refer their patients when they refuse to fill a prescription? ○ Have you seen a fake prescription? ○ How did the pharmacist/pharmacy handle the fake prescription? ● Community Pharmacy Workflow and Operations <ul style="list-style-type: none"> ○ How does the pharmacy handle drug shortages? ○ What do you think about prior authorizations (PA's)? ○ How do PA's affect the pharmacy workflow? ○ What else can back up the workflow of a pharmacy? ○ What is the main method of community that a pharmacist/pharmacy has with providers? Insurance companies? ○ What is the patient's expectation of the pharmacist? Provider? What are the relationships between the pharmacy staff and the providers with which they communicate for their patients? 	<ul style="list-style-type: none"> ● Advanced Services in Community Pharmacy and Pharmacy Laws <ul style="list-style-type: none"> ○ Does your pharmacy bill for patient care services? ○ What do you see as needed education to provide all of these services? ○ Have you seen a pharmacist administering immunizations? Which vaccinations? ○ What types of influenza vaccines are being administered? ○ What is the youngest person you've seen receive a vaccination? Oldest? ○ Have you seen an MTM consult? ○ What difficulties have you encountered concerning the laws and regulations around e-prescribing? ○ What experiences have you encountered concerning the controlled prescription drug database? <p>IPPE Preceptor of the Year Nominations</p> <p>Overall IPPE Experience Discussion</p>

Section Three

Community Introductory Pharmacy Practice Experience Overview

Course title

PHRD 412 Introductory Pharmacy Practice Experience II: Community Pharmacy Practice
– 3 credits

Course description

This course is part of a four-course sequence designed to introduce students to a variety of practice settings with particular emphasis on community, health system, and clinical pharmacy practice. The experiences are intended to increase in time and complexity as students progress through the curriculum. This course sequence supplements the introductory experiences embedded into Pharmacist Care Lab I & II, Developing the Leader Within, Pharmacy Practice Management and Care of Diverse Populations. Students will gain experiences in a variety of settings dealing with issues pertinent to community pharmacy practice. Communication skills and professionalism along with the importance of an interdisciplinary approach to patient care will be emphasized throughout the sequence. In this course, students will complete 125 hours, 80 hours (two weeks) of which will be full-time in a community pharmacy setting. This full-time experience will be followed by a longitudinal component where the student will spend 3 hours per week at the practice site for an additional 15 weeks. This experience is intended to prepare students for the Advanced Pharmacy Practice Experiences by introducing them to community pharmacy practice in which an emphasis will be placed on learning about prescription processing, medication therapy management, pharmacy management and operations, health promotion and wellness, and patient counseling. Students will have the opportunity to participate in patient-oriented activities and communicate with other health care professionals.

Learning Outcomes

This course provides the foundational knowledge and skills needed for the achievement of the following terminal learning outcomes at the conclusion of the professional program. Please refer to the Student Learning Outcomes Document for detailed information. The numbers correspond to the actual number of the outcome in the Student Outcomes Document.

2. Evaluate and apply scientific and clinical literature to patient care
3. Display professional behavior when interacting with patients, caregivers, other health care professionals and the public
4. Develop treatment plans to ensure optimal therapeutic and disease outcomes

5. Communicate with patients, caregivers, health care professionals and the lay public to provide safe and optimal use of medications and related devices
7. Ensure the safe and accurate delivery of medications and related devices
8. Comply with and uphold the laws and ethical standards of and related to the practice of pharmacy
9. Manage pharmacy systems and personnel in the delivery of medications and related devices
11. Lead the profession to promote safe medication use and to improve health care
12. Maintain professional competence

Course Objectives

The following course objectives were designed to support the development of the knowledge and skills needed for achievement of terminal student learning outcomes listed above. In turn, all student activities and assignments will support the achievement of the course objectives listed below.

Professionalism

1. Display professional behavior when interacting with patients and other health care professionals.
2. Provide ethical patient care.
3. Demonstrate the actions needed for life-long learning abilities.

Patient Care and Communication

4. Demonstrate effective communication skills when interacting with diverse patient and professional populations.
5. Identify, retrieve, and evaluate clinical literature to answer drug information questions.
6. Identify and resolve medication therapy problems.
7. Accurately and completely reconcile medications across the continuum of care.
8. Counsel patients regarding drug therapy.
9. Document patient care interventions.
10. Describe the responsibility of the pharmacist in communicating and collaborating with physicians, nurses, and other health-care professionals in optimizing the medication use process.
11. Explain how continuous quality improvement initiatives are utilized to improve and ensure quality patient care.
12. Describe the roles and responsibilities of other members of the health care team.
13. Demonstrate critical thinking skills to facilitate decision making.

Practice Management and Pharmacy Operations

14. Perform professional activities in compliance with HIPAA.
15. Comply with federal, state and local regulations that govern the practice of pharmacy.
16. Discuss pharmacy management and operations issues.
17. Discuss the roles and responsibilities of personnel necessary to effectively operate the pharmacy.
18. Evaluate and fill a prescription in compliance with state and federal laws.
19. Describe and evaluate the drug distribution system.
20. Demonstrate proficiency in reading and understanding common medical terminology.
21. Perform calculations required to compound, dispense and administer medications.
23. Discuss drug and pharmacy service issues.
25. Discuss the expanding role of technology and informatics in the practice of pharmacy and patient care
26. Explain and participate in inventory management and purchasing including ordering, receiving, storing, and returning merchandise.
27. Describe the organizational structure of the pharmacy and its relationship to the parent organization.

Learning Strategies/Methodologies

A variety of learning strategies are used in this course to provide students with opportunities to acquire the knowledge, attitudes, and practice skills necessary to achieve the course objectives. These strategies include but are not limited to:

Activities

Assigned activities will require students to integrate what they observe, learn and do at the practice site along with assigned readings to fully comprehend a specific topic. Depending on the specific activity, it may be completed within one site visit or may require the student to complete the work over several weeks throughout the rotation. Additionally, students should expect that some of the work must be completed at home in preparation for an on-site activity. This course manual provides students and preceptors with worksheets, where appropriate, to provide guidance for completion of the activity. Preceptors will review and sign-off the worksheets once they are uploaded to E-Value. Students are expected to routinely upload activities and alert their preceptor of the uploaded information for review.

Preceptor Discussions

Active participation in the medication use process and discussions with preceptors and other pharmacists and staff will help students to learn as much as they can from the rotation. Preceptors may assign students relevant topics for research and discussion.

On-Campus Discussions

Three mandatory on-campus discussions provide students with opportunities to further explore relevant topics and learn from each other's experiences. **Students will be expected to attend all on campus discussions.**

Final Reflection

At the end of the rotation, students must complete a reflective essay of their overall rotation experience and upload to E- value no later than 8:00 a.m. on the last day of the rotation. Final reflections are not graded, but instead reviewed by the Office of Experiential Education in order to continually improve the IPPE experiences.

Pre-requisite and co-requisite course requirements for Introductory & Advanced Pharmacy Practice Experiences

Year	Fall Semester - (19 credits)	Credits	Spring Semester - (17 credits)	Credits
P-1	PHRD 300: Foundations for Pharmacy Practice	2	PHRD 306: Pharmacist Care Lab II	2
	PHRD 301: Pharmaceutical Calculations	2	PHRD 308: Developing the Leader Within	2
	PHRD 302: Pharmacy & the U.S. Health Care System	3	PHRD 309: Immunology	3
	PHRD 303: Pharmaceutics I & Lab	4	PHRD 310: Care of Diverse Populations	3
	PHRD 304: Pharmacist Care Lab I	2	PHRD 311: Pharmaceutics II & Lab	4
	PHRD 305: Biochemistry	4	PHRD 312: Pharmacy Practice Management	3
	PHRD 307: Applied Biomedical Sciences Workshop	3		
	Fall Semester - (17 Credits)	Credits	Spring Semester- (19 credits)	Credits
P-2	PHRD 400: Biopharmaceutics & Clinical Pharmacokinetics	3	PHRD 405: Women's Health Issues	2
	PHRD 401: Clinical Research Design	3	PHRD 406: Pharmacist Care Lab IV	1
	PHRD 404: Pharmacists Care Lab III	1	PHRD 408: Pharmacy Law & Ethics	3
	PHRD 410 or 412: Introductory Pharmacy Practice Experiences I or II	3	PHRD 410 or 412: Introductory Pharmacy Practice Experiences I or II	3

	PHRD: 413 Pharmacotherapeutics I - Principles of Medicinal Chemistry & Pharmacology*	2	PHRD 417: Pharmacotherapeutics IV – Infectious Diseases	4
	PHRD 414: Pharmacotherapeutics II - Principles of Pharmacotherapeutics	2	PHRD 418: Pharmacotherapeutics V – Gastrointestinal Disorders	2
	PHRD 416: Pharmacotherapeutics III - Self-Care & Dermatologic Disorders	3	PHRD 419: Pharmacotherapeutics VI - Hematologic, Rheumatologic Disorders & Surgery	2
			Professional Elective	2
	Fall Semester - (19 credits)	Credits	Spring Semester-(18 credits)	Credits
P-3	PHRD504: Pharmacists Care Lab V	1	PHRD 506: Pharmacists Care Lab VI	1
	PHRD 505: Human Resources Management	3	PHRD 508: Complementary Medicine & Human Nutrition	3
	PHRD 507: Public Health	3	PHRD 509: Evidence Based Medicine	2
	PHRD 510: Longitudinal Care I	1	PHRD 512: Longitudinal Care II	1
	PHRD 513: Pharmacotherapeutics VII - Pulmonary Disorders	2	PHRD 516: Pharmacotherapeutics X - Endocrine Disorders & Women's Health	2
	PHRD 514: Pharmacotherapeutics VIII - Cardiovascular Disorders	4	PHRD 517: Pharmacotherapeutics XI - Neoplastic Disorders	2
	PHRD 515: Pharmacotherapeutics IX - Renal Disorders	2	PHRD 518: Pharmacotherapeutics XII - Central Nervous System Disorders	4

	Professional Elective	3	Professional Elective	3
	Summer/Fall/Spring	Credits	(36 credits)**	
P-4	PHRD 700 Advanced Pharmacy Practice Ambulatory Care	5	<i>**All APPEs are five weeks in duration except 707</i>	
	PHRD 701 Advanced Pharmacy Practice Acute Care General Medicine	5	<i>* Pharmacotherapeutics is taught sequentially within a semester</i>	
	PHRD 702 Advanced Health Systems Pharmacy Practice	5		
	PHRD 703 Advanced Community Pharmacy Practice	5		
	PHRD 704 Advanced Pharmacy Practice Elective I	5		
	PHRD 705 Advanced Pharmacy Practice Elective II	5		
	PHRD 706 Advanced Pharmacy Practice Elective III	5		
	PHRD 707 Advanced Pharmacy Practice & Education Capstone	1		
			Total Program Credits	146

*** Students must successfully pass the P-1 year in order to progress to Introductory Pharmacy Practice Experiences***

COURSE DESCRIPTIONS

PHRD 300 Foundations for Pharmacy Practice (2 credits)

The purpose of this course is to provide students with the foundational concepts and skills needed to practice pharmacy in the 21st Century as the role of the pharmacist expands and continues to change. In addition to one's knowledge of the scientific basis of practice, the ability to communicate and be an effective team member is critical to the pharmacist's role as an

educator, clinician and member of the health care team. As such, the processes of self and group assessment, team development and the use of effective communication strategies will be introduced in this course and reinforced throughout the curriculum. Application of these processes will occur through lecture, discussions, assignments, role-playing and case studies.

Lecture two hours per week.

PHRD 301 Pharmaceutical Calculations (2 credits)

Accurately performing pharmaceutical calculations is a critical component in providing patient care in every pharmacy practice environment. This course explores the various methods used to perform pharmaceutical calculations required for the usual dosage determinations and solution preparation. This course is an introduction to pharmaceutical prescriptions, the basic technique of calculating, weighing and measuring the ingredients involved in the formulations of various dosage forms. In addition, it provides knowledge in systems of weights and measures, Latin terms, reducing and enlarging formulas, ratio and proportions, various expressions of concentration, intravenous flow rates and dilution factors. Emphasis will also be placed on the skills involved in interpreting prescription and medication orders, and also identifying prescription errors and omissions. Students will attend lecture one hour per week.

PHRD 302 Pharmacy & the U.S. Healthcare System (3 credits)

This course provides students with a broad overview of the organization, delivery and financing of medical and pharmaceutical care in the U.S. The impact of state and federal policies on the practice and economics of pharmacy practice and the role of the pharmacist in health care legislation will be discussed. *Lecture three hours per week.*

PHRD 303 Pharmaceutics I (4 credits)

This is the first of a two-semester course sequence designed to teach students the basic principles and application of physio-chemical principles necessary for the design, development and preparation of pharmaceutical dosage forms. Students will develop the basic skills and techniques necessary for the compounding of pharmaceutical delivery systems, the appropriate evaluation, documentation and labeling of prescriptions and the mathematical calculations essential to compounding. *Lecture three hours per week, laboratory three hours per week.*

Co-requisite: PHRD 301 Pharmaceutical Calculations

PHRD 304 Pharmacist Care Lab I (2 credits)

This is the first of a six-semester sequence designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. Early introductory pharmacy practice experiences will also be incorporated into Pharmacist Care Lab I. *Laboratory three hours per week.*

PHRD 305 Biochemistry (4 credits)

This course will provide students with a fundamental understanding of the structure, function and catabolism of biomolecules including carbohydrates, lipids, proteins and nucleic acids. Topics covered will include; bioenergetics and metabolism, genes and chromosomes, DNA and RNA metabolism, regulation of gene expression and recombinant DNA technology.
Lecture four hours per week.

PHRD 306 Pharmacist Care Lab II (2 credits)

This is the second of a six-semester sequence designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. Early introductory pharmacy practice experiences will also be incorporated into Pharmacist Care Lab II. *Laboratory three hours per week. Pre-requisite: PHRD 304 Pharmacist Care Lab I*

PHRD 307 Applied Biomedical Sciences Workshop (3 credits)

This course utilizes a small group, problem-based learning approach to teach students the interrelationship between and application of basic biomedical sciences principles to disease pathology, pharmacology, pharmacogenetics, and drug therapy. Students will be engaged in a workshop two hours per week and formative assessment one hour per week.

PHRD 308 Developing the Leader Within (2 credits)

As a health care professional, the pharmacist must be able to take a leadership role within his/her own practice, profession and community at large. This course will provide students with the opportunity for self-exploration, exploration of leadership models, and discussion of the relevance of political advocacy to pharmacy practice. This course will incorporate the communication, teamwork and self and group assessment skills that are introduced in Foundations for Pharmacy Practice. *Lecture and application two hours per week.*
Pre-requisite: PHRD 300 Foundations for Pharmacy Practice

PHRD 309 Immunology (3 credits)

This course is an introduction to the organization, function and regulation of the immune system including the basic properties of humoral and cell-mediated immune responses, antigen and antibody structure and function, effector mechanisms, complement, major histocompatibility complexes, and cytotoxic responses. The role of these basic immunology principles in immuno deficiencies, auto-immune disorders, hypersensitivity reactions, immunity

issues associated with transplantation, cancer and antibody based drug therapy will also be covered. *Lecture three hours per week.*

PHRD 310 Care of Diverse Populations (3 credits)

This first public health course will introduce the socioeconomic, cultural, ethnic, geographic, and other variables which shape healthcare practice and perception. Students will become versed in common practices, myths, barriers, trends, resources, and care principles of diverse populations. An emphasis will be placed on the development of cultural competence such that students will be able to optimally work with diverse patient populations. Students will be required to participate in community based experiences that supports the course learning goals and objectives. *Lecture three hours per week.*

PHRD 311 Pharmaceutics II (4 credits)

This is the second of a two-semester course sequence designed to teach students the basic principles and application of physio-chemical principles necessary for the design, development and preparation of pharmaceutical dosage forms. Students will develop the basic skills and techniques necessary for the compounding of pharmaceutical delivery systems, the appropriate evaluation, documentation, and labeling of prescriptions and the mathematical calculations essential to compounding. This course will build on the concepts introduced in Pharmaceutics I. *Lecture three hours per week, laboratory three hours per week. Pre-requisite: PHRD 303 Pharmaceutics I*

PHRD 312 Pharmacy Practice Management (3 credits)

This course provides students with an understanding of financial and operations management as it relates to pharmacy practices in community, hospital and other practice settings. Topics such as inventory control, pricing, marketing, business plan development for new services, and management of innovative changes in pharmacy practice will be included. *Lecture three hours per week.*

PHRD 400 Biopharmaceutics & Clinical Pharmacokinetics (3 credits)

Biopharmaceutic and basic pharmacokinetic parameters such as absorption, distribution, metabolism and elimination, the relationship between drug concentration and clinical response, impact of patient characteristics and disease states on pharmacokinetic parameters and pharmacokinetic variations across the lifespan will be discussed. Students will learn how to calculate and interpret pharmacokinetic parameters, discuss and explain pharmacokinetic principles, assess factors that affect drug disposition, design and adjust drug dosage regimens, and predict and explain the mechanism(s) involved in drug interactions. *Lecture three hours per week. Pre-requisite: P-2 standing*

PHRD 401 Clinical Research Design (3 credits)

This course will introduce the research models and biostatistics that are commonly used in clinical research. Emphasis will be placed on literature evaluation and the application of design models to hypothesis testing in clinical practice. Ethical principles of clinical research and the role of institutional review boards will also be discussed. *Lecture three hours per week.*

PHRD 404 Pharmacist Care Lab III (1 credit)

This is the third of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. *Laboratory three hours per week. Pre-requisite: PHRD 306 Pharmacist Care Lab II*

PHRD 410 Introductory Pharmacy Practice Experiences I (3 credits)

This is the first of a four-course sequence designed to introduce students to a variety of practice settings with particular emphasis on health system practice. The experiences are intended to increase in time and complexity as students progress through the curriculum. This course sequence supplements the introductory experiences that are embedded into Pharmaceutical Care Lab I & II and Care of Diverse Populations. Students will gain experiences with a variety of issues pertinent to health system practice, and will be given an opportunity to reflect and discuss their health system experiences. Faculty will meet with students throughout the week to provide feedback and answer questions arising from their experiences. Communication skills along with the importance of an interdisciplinary approach to patient care will be emphasized throughout the sequence. In this first course, students will complete 125 hours, 80 hours of which will be full-time in a health system setting. Students will spend two weeks, full-time at the assigned practice site followed by 3 hours per week for 15 weeks. *Pre-requisite: P-2 standing.*

PHRD 413 Pharmacotherapeutics I – Principles of Medicinal Chemistry & Pharmacology (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. It is designed to provide students with the opportunity to learn, integrate and apply concepts from the four content areas in order to provide the necessary information for pharmaceutical management of a variety of disease states. In this first of twelve modules, basic principles of pharmacology and medicinal chemistry, as they relate to disease state management, are presented and serve as foundational material for subsequent modules. *Pre-requisite PHRD 305 Biochemistry, PHRD 309 Immunology, PHRD 307 Applied Biomedical Sciences Workshop*

PHRD 414 Pharmacotherapeutics II – Principles of Pharmacotherapeutics (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. It is designed to provide students with the opportunity to learn, integrate and apply concepts from the four content areas in order to provide the necessary information for pharmaceutical management of a variety of disease states. In this second of twelve modules basic principles of: absorption, distribution, metabolism and excretion (ADME), homeostasis, drug interactions, drug induced diseases and clinical lab values are presented and serve as foundational material for subsequent modules. Implications and application across the life span will be incorporated. *Pre-requisite PHRD 413 Pharmacotherapeutics I*

PHRD 416 Pharmacotherapeutics III – Self-Care & Dermatologic Disorders (3 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this third of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of fever, eye disorders, cough, cold, allergy and dermatologic disorders. Implications and application across the life span will be incorporated. *Pre-requisites: PHRD 413, 414 Pharmacotherapeutics I and II*

PHRD 405 Women's Health (2 credits)

This course provides an overview of gender-based medicine and implications of gender-based research on the prevention, diagnosis and treatment of diseases and conditions in women. In addition, health related issues that are unique to women including psychosocial issues that occur during the course of their lifespan will be discussed. Information in this course will supplement information taught in the Pharmacotherapeutics course sequence. *Lecture two hours per week.*

PHRD 406 Pharmacist Care Lab IV (1 credit)

This is the fourth of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. *Laboratory three hours per week. Pre-requisite PHRD 404 Pharmacist Care Lab III*

PHRD 408 Pharmacy Law & Ethics (3 credits)

This course will focus on the study of state and federal statutes, regulations and court decisions which govern the practice of pharmacy and drug distribution. Civil liability and elements of

business and contract law will also be addressed. Ethical issues in pharmacy practice facing health care providers, patients and society will also be discussed. Particular emphasis will be placed on examining the integration of pharmacy law and ethics when making patient care decisions. *Lecture three hours per week.*

PHRD 412 Introductory Pharmacy Practice Experiences II (3 credits)

This is the first of a four-course sequence designed to introduce students to a variety of practice settings with particular emphasis on community practice. The experiences are intended to increase in time and complexity as students progress through the curriculum. This course sequence supplements the introductory experiences that are embedded into Pharmaceutical Care Lab I & II and Care of Diverse Populations. Students will gain experiences with a variety of issues pertinent to community practice, and will be given an opportunity to reflect and discuss their health system experiences. Faculty will meet with students throughout the week to provide feedback and answer questions arising from their experiences. Communication skills along with the importance of an interdisciplinary approach to patient care will be emphasized throughout the sequence. In this first course, students will complete 125 hours, 80 hours of which will be full-time in a community setting. Students will spend two weeks, full-time at the assigned practice site followed by 3 hours per week for 15 weeks. *Pre-requisite: P-2 standing.*

PHRD 417 Pharmacotherapeutics IV – Infectious Diseases (4 credits)

Pharmacotherapeutics (PT) is a 2-year, team-taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry and therapeutics. In this fourth of twelve modules, students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of fungal, bacterial and viral diseases. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I and II*

PHRD 418 Pharmacotherapeutics V Gastrointestinal Disorders (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team-taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry and therapeutics. In this fifth of twelve modules, students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of gastrointestinal disorders. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I and II*

PHRD 419 Pharmacotherapeutics VI – Hematologic, Rheumatologic Disorders & Surgery (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this sixth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of hematological, rheumatological disorders as well as the appropriate utilization of pharmacological substances in surgery. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I and II*

PHRD 504 Pharmacist Care Lab V (1 credit)

This is the fifth of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. *Laboratory three hours per week. Pre-requisite: PHRD 406 Pharmacist Care Lab IV*

PHRD 505 Human Resource Management (3 credits)

This course will focus on personnel management as it relates to pharmacy practice. Topics such as performance management, effective hiring and recruitment strategies, retaining, motivating, developing and rewarding of employees will be discussed. Information in this course will provide the necessary foundation for students to develop the supervisory skills needed for practice. *Lecture three hours per week. Pre-requisite 312 Pharmacy Practice Management*

PHRD 506 Pharmacist Care Lab VI (1 credit)

This is the sixth of a six-semester sequence is designed to integrate material from the curriculum and introduce selected practice related topics. The goal is for students to develop the ability to apply information as well as practice skills that are taught throughout the curriculum. Emphasis is placed on the use of active learning strategies, case studies, role-plays, and presentations in order to engage students in the learning process. Students are expected to synthesize information at increasing levels of complexity as they progress through the course sequence. *Laboratory three hours per week. Pre-requisite: PHRD504 Pharmacist Care Lab V*

PHRD 507 Public Health (3 credits)

This is the second public health course will build on the materials content from Care of Diverse Populations and early experiential activities. This course focuses on population based health care and the role of pharmacists in public health. The impact of health care disparities, generational differences and health promotion and prevention strategies on population based

care will be discussed. Project and community based experiences will be utilized throughout the curriculum so that students can apply or further explore concepts discussed in this course.

Lecture three hours per week. Pre-requisite: PHRD 310 Care of Diverse Population

PHRD 508 Complementary Medicine & Nutrition (3 credits)

This course is designed to introduce students to complementary forms of medicine such as herbal therapy, homeopathy, chiropractic, acupuncture/acupressure, body massage, ayurvedic, and shamanic practices. Emphasis is placed on the student's ability to retrieve and evaluate these forms of complementary medicine with the intent of providing appropriate patient recommendations. This course will also provide students with an overview of nutritional concepts and use of parenteral and enteral nutrition. *Lecture three hours per week. Pre-requisite: PHRD 401 Clinical Research Design*

PHRD 509 Evidence Based Medicine (2 credits)

This course is designed to teach students how to identify, analyze and apply current evidence to clinical practice. Through case examples and drug information questions, students will find, analyze, and apply evidence to solve medication related problems. This course will build upon principles discussed in Clinical Research Design. Application and clinical use of biostatistics will be emphasized. *Lecture two hours per week. Pre-requisite: PHRD 401 Clinical Research Design*

PHRD 512 Longitudinal Care (1 credit)

This service-learning course is designed to provide students with opportunities to deliver pharmaceutical care to an ambulatory patient population on a continuing basis and to develop an understanding of patient-specific and social issues surrounding an individual or family's ability to be adherent with health-related instructions. Additionally, this course will provide students with a "caring" foundational experience as part of the professionalization process that inculcates the values and ethics of treating people as both humans and individuals. Students will be assigned to a patient in the community for the duration of the semester. Each student will make arrangements to visit his/her assigned patient on a regular basis for at least one hour and will be required to attend weekly or bi-weekly on-campus discussion groups. Students are required to write reflections of their patient experiences and document patient interactions through SOAP notes. This course will not only provide students with an opportunity to apply didactic knowledge to real life patients, but will also meet the needs of individuals within the community. *Pre-requisites: P-3 standing, PHRD 413, 414 Pharmacotherapeutics I & II*

PHRD 513 Pharmacotherapeutics VII – Pulmonary Disorders (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this seventh of twelve modules students will have the opportunity to learn,

integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of pulmonary disorders. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I & II*

PHRD 514 Pharmacotherapeutics VIII – Cardiovascular Disorders (4 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this eighth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of cardiovascular disorders. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I & II*

PHRD 515 Pharmacotherapeutics IX – Renal Disorders (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this ninth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of renal disorders. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I & II*

PHRD 516 Pharmacotherapeutics X – Endocrine Disorders (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this ninth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of endocrine disorders. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I and II*

PHRD 517 Pharmacotherapeutics XI – Neoplastic Disorders (2 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this eighth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of neoplastic diseases. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics and II*

PHRD 518 Pharmacotherapeutics XII – Central Nervous System Disorders (4 credits)

Pharmacotherapeutics (PT) is a 2-year, team taught, integrated course combining material from four major content areas: pathophysiology, pharmacology, medicinal chemistry, and therapeutics. In this eighth of twelve modules students will have the opportunity to learn, integrate and apply concepts from the four content areas in order to provide appropriate pharmaceutical management of central nervous system disorders. Implications and application across the life span will be incorporated. *Pre-requisites: P-2 standing; PHRD 413, 414 Pharmacotherapeutics I & II Pharmacotherapeutics I and II*

Advanced Pharmacy Practice Experiences (APPE)

Students must successfully complete all didactic coursework and IPPE prior to participation in APPE.

PHRD 700 Advanced Pharmacy Practice Ambulatory Care (5 credits)

This rotation is a structured, full-time, 5-week patient care experience in ambulatory care. It is designed to provide the student with the opportunity to develop and refine the skills necessary to deliver pharmaceutical care, with an emphasis on rational drug therapy and outcomes, to an ambulatory care patient population. Students will have the opportunity to apply their didactic knowledge to various therapeutic issues and disease states encountered in clinical practice. Emphasis will be placed on problem-solving, critical thinking, and basic clinical skills such as patient counseling, obtaining medication histories, drug information retrieval and evaluation, and drug therapy monitoring. Interaction and communication with other health care professionals for the promotion of optimal drug therapy are stressed to help the student develop a sound professional approach to the practice of pharmacy. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

PHRD 701 Advanced Pharmacy Practice Acute Care General Medicine (5 credits)

This rotation is a structured, full-time 5-week patient care experience in adult internal medicine in an institutional acute care setting. It is designed to provide the student with the opportunity to develop and refine the skills necessary to deliver pharmaceutical care, with an emphasis on rational drug therapy and patient outcomes, to an inpatient population. This will be accomplished by participation in the daily activities of work rounds with the internal medicine team and through consultation with other health care providers involved in the care of patients. Students will have the opportunity to apply their didactic knowledge to various therapeutic issues and disease states encountered in clinical practice. Interaction and communication with other health care professionals for the promotion of optimal drug therapy are stressed to help the student develop a sound professional approach to the practice of pharmacy. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

PHRD 702 Advanced Health Systems Pharmacy Practice (5 credits)

This rotation is a structured, full-time, 5 –week pharmacy practice experience in health-system pharmacy. It is designed to provide the student with the opportunity to develop understanding and competence within all aspects of health-system pharmacy. The students will accomplish this through participation in a hospital pharmacy department which provides a variety of services that may include, but not limited to, medication reconciliation, therapeutic pathways, antibiotic surveillance, patient counseling, pharmacokinetic monitoring, parenteral nutrition consults, and interdisciplinary educational sessions. The student will also gain experience in managing the procurement, ordering, dispensing, monitoring, and administration of medication products. Students will also have the opportunity to learn administrative skills through activities such as management of technical staff and supportive personnel, compliance with relevant laws and standards, financial analysis, and health-system policy and procedures. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

PHRD 703 Advanced Community Pharmacy Practice (5 credits)

This rotation is a structured, full-time, 5-week patient care experience in community practice. It is designed to provide the student with the opportunity to develop and refine the skills necessary to deliver pharmaceutical care, with an emphasis on rational drug therapy and outcomes. Students will have the opportunity to apply their didactic knowledge to various therapeutic issues and disease states encountered in clinical practice. Emphasis will be placed on problem-solving, critical thinking, patient counseling, application of clinical skills, and providing medication therapy management services to patients whenever possible. Opportunities for further development in the use of OTC, alternative therapies, and home diagnostic tests and monitoring systems and durable medical equipment will be provided. Issues related to reimbursement by third parties will be discussed. Skill development in the dispensing process, extemporaneous compounding (depending on the site) is an additional facet of the rotation. In addition, students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into this rotation.

PHRD 704, 705, 706 Advanced Pharmacy Practice Elective I, II, III (5 credits each)

Each elective advanced pharmacy practice experience (APPE) site will provide opportunities for students to develop the advanced pharmacy practice experience program outcomes in areas such as, but not limited to, community, health-system, clinical, industry, and administrative pharmacy practice. These experiences will further develop a student's knowledge and skills in the areas of their practice choice. Interaction with other health care professionals, professionalism, and strong communication skills is strongly emphasized. Students are encouraged to broaden their existing competencies and incorporate their professional and personal goals into these rotations.

PHRD 707 Advanced Pharmacy Practice & Education Capstone (1 credit)

This one week capstone experience will be completed after successful completion of PHRD 700 through PHRD 706. This course will integrate campus based patient care discussions, project poster sessions and community based health promotion & prevention activities. These activities will be developed and led by students under the direct supervision of a faculty member.

Pre-requisites: 700-706

Section Four

Policies and Procedures

Policies and Procedures

Attendance Policy

Students will complete 125 hours in the assigned health-system/community pharmacy. Two-weeks (80 hours) will be a full-time experience followed by a longitudinal component of 3 hours per week at the practice site for an additional 15 weeks. The 125 required hours does not include time needed to complete activities, readings or attend additional activities as deemed appropriate by preceptors. Preceptors reserve the right to require students to participate in outside activities that will supplement their learning experience at the site. This time is in addition to the 125 hours and cannot be exchanged for the regular 3-hour weekly time period.

Attendance is mandatory for IPPE rotations. Students are required to report to their scheduled site on time. In case of an emergency, illness or tardiness, students must notify the preceptor and the OEE, via email (if possible) and telephone immediately. Students must arrange with the preceptor to make up missed time. The student must also complete and submit the 'Experiential Education Absence Request Form' to the preceptor and OEE for any absence. The form must have arrangements documented for how the missed time will be made up, the preceptor's signature and uploaded for the experiential assistant director's review.

In unusual circumstances in which the student must plan for an absence, prior approval must be obtained from the OEE and the preceptor. The student must complete and upload the 'Experiential Education Absence Request Form' to E-Value. The form must have arrangements documented for how the missed time will be made up, signed by the preceptor, and uploaded to e-value for the experiential assistant director. Failure of a student to notify their preceptor of any absence will be considered an unexcused absence and may result in failure of the rotation.

Attendance is mandatory for IPPE On-Campus Discussions. Students are required to attend all on campus discussions. In case of an emergency or illness, students must notify the faculty instructor and the OEE, via email prior to the start of the discussion. Students must submit all assignments for that day within 24 hours of the absence. **The Office of Experiential Education reserves the right to lower a student's mean professionalism evaluation score by 1.0 (E.g. 5 to 4) for each unexcused absence which may result in failure of the rotation.**

Professionalism Policy

Student pharmacists are also members of the pharmacy professional community. As such, it is important for a student to build and reinforce a professional identity that is built upon the principles of integrity, ethical behavior, honesty, fairness and mutual respect. As a result, students shall conduct themselves in a professional manner at all times and follow all established School and practice site policies. Adherence to these principles is vital to the development of a professional relationship between the pharmacist and his/her patients and society. Students agreed to live by these principles upon acceptance into the School of Pharmacy.

Professionalism is defined as the active demonstration of the attributes of a professional. These attributes include: knowledge and skills of the profession, commitment to self-improvement of skills and knowledge, service orientation, pride in the profession, covenantal relationship with patient, creativity and innovation, conscience and trustworthiness, accountability for one's work, ethically sound decision making and leadership. Professional socialization is the process by which an individual develops the attitudes, values and beliefs of a professional. The goal of professional socialization is to develop professionalism as described above and this process must begin at the beginning of an individual's professional education. Professionalism is demonstrated by a student who:

Communication & Interpersonal Interactions

- Uses appropriate verbal & non-verbal communication
- Communicates assertively – actively and appropriately engages in dialogue or discussion
- Is non-judgmental – student demonstrates an attitude of open-mindedness towards others and situations; does not “stereotype” others or prejudge situations
- Is respectful – demonstrates regard for self, standardized patients, peers, faculty, staff and university property
- Is empathetic – demonstrates appreciation of others' positions; attempts to identify with other with others' perspectives; demonstrates consideration towards others
- Is diplomatic – is fair and tactful in all dealings with patients, peers, faculty and staff.
- Is confident – acts & communicates in a self-assured manner, yet with modesty and humility
- Is cooperative – i.e. non-argumentative; willing and helpful
- Is truthful in all interactions, being straightforward

Work Ethic

- Is punctual
- Is reliable, dependable, accountable for one's actions
- Behaves in an ethical manner
- Produces quality work
- Accepts constructive criticism and modifies behavior if necessary
- Is self-directed in undertaking tasks, self-motivated
- Handles stress – remains calm, levelheaded, and composed in critical, stress or difficult situations
- Is an active learner – seeks knowledge; asks questions, searches for information, takes responsibility for own learning
- Follows through with responsibilities – if task is left incomplete or problem is not resolved, student seeks aid
- Demonstrates a desire to exceed expectations – goes “above and beyond the call of duty”, attempts to exceed minimal standards and requirements for tasks/assignments/responsibilities
- Utilizes time efficiently – allocates and utilizes appropriate amounts of time to fulfill responsibilities; utilizes others' time wisely

All cell phones and pagers are to be on silent mode or turned off. Cell phones, pagers, and text messages are **NOT** to be answered at any time. Cell phone use is only acceptable when accessing drug information resources or when permitted by the preceptor for emergency purposes.

Professional Dress Policy

Students will dress professionally and pay attention to personal hygiene in the practice environment. Attire and personal grooming should not distract from nor compromise the professional integrity of the School of Pharmacy or the pharmacy profession. The following is considered appropriate attire:

- a) **all** students are to wear a clean, white, long-sleeved lab jacket (provided in the P-1 year) with the School of Pharmacy logo and a name badge
- b) men: slacks, collared shirt with tie, dress shoes and socks
- c) women: slacks, skirts, dresses, dress shoes
- d) hair (including facial hair) is to be neatly trimmed and styled
- e) fingernails are to be neat, clean and well maintained – acrylic nails and nail polish is not permitted at any time during the experience as it is in violation of USP 797 clean room standards
- f) body piercings should have limited visibility and tattoos should be covered

- g) perfume and scented creams are not allowed in the practice environment due to the potential to exacerbate patient allergies and lung conditions

Students are expected to adhere to any other site specific dress policies.

Mini-skirts, jeans, sneakers, low-cut dresses, tee shirts, torn clothing, baseball caps, etc. are **NOT** professional dress. Students should note the difference between professional attire and fashionable attire. In addition, students will be spending a great deal of time standing and walking, please wear appropriate shoes.

The following types of clothing are not allowed at any time:

- Hats, caps or other headgear are not to be worn indoors. Head covers that are required for religious purposes or to honor cultural tradition are permitted.
- Tank tops, tube tops, halter tops, spaghetti string or off the shoulder tops
- Clothes that are sheer, low cut, revealing or tops that do not cover to the waist; slacks, skirts or pants that expose skin below the waist
- Short shorts, mini-skirts, pajama bottoms
- Flip flops, thong sandals, shower shoes
- Clothing with obscene or lewd text or pictures, depictions of alcohol, drugs or other smoking materials

Students who are considered to be in violation of the professional dress policy will be asked to leave the site and return in appropriate attire. The Office of Experiential Education will be notified as soon as possible of any students who are asked to leave the rotation. Students will be responsible for making up any time missed at the site.

Social Media Policy

Social Medias are powerful communication tools. They are defined as media intended to be disseminated through social interaction, created using highly accessible and scalable publishing techniques. Because of the emerging nature of social media platforms, these guidelines do not attempt to name every current and emerging platform. Rather, they apply to those cited and any other online platform available and/or emerging including social networking sites and sites with user-generated content (examples include- but are not limited to YouTube, Facebook, iTunes, LinkedIn, Twitter, Flickr, MySpace and Blogs).

The following guidelines must be followed by all students, faculty and staff of Notre Dame of Maryland University, School of Pharmacy.

- Protect Confidential and Proprietary Information: Do not post confidential or proprietary information about the University or School, students, employees or alumni.
- Respect of Copyright and Fair Use: Content that is threatening, obscene, a violation of intellectual property or privacy laws, or otherwise injurious or illegal, may not be used.
- Think before Posting: There are no “private” social media sites. Archived material can re-emerge years after its publication date, and comments can be forwarded or copied. Be mindful of any photos that are selected for posting on any social media site.
- Avoid University Logos for Endorsements: Do not use Notre Dame of Maryland University logos or any other University or School images or iconography on personal social media sites.
- Respect University and School Image: In keeping with the traditions of Notre Dame of Maryland University, School of Pharmacy, be professional, thoughtful and respectful. As a student of the School of Pharmacy, postings can impact the image of the University as well as that of the student.
- Terms of Service: Adhere to the *Terms of Service* of any social media platform employed.

Disciplinary Policy

Notre Dame of Maryland University, School of Pharmacy student pharmacists are expected to display high standards of character both in their didactic and experiential coursework. Student pharmacists in the professional practice experience program will be expected to adhere to the Student Pledge of Professionalism, Pharmacist Code of Ethics and Oath of the Pharmacist. In addition, students must respect and adhere to specific rules and regulations governing individual practice sites.

Student deviations from the rules and regulations set forth by the Professional Practice Experiences Manual and/or those of specific site(s), will incur disciplinary action. This may include, but is not limited to:

- Dismissal from a practice site, temporarily or indefinitely
- Failure of a rotation
- Dismissal from the School of Pharmacy

The preceptor(s) or director of pharmacy will immediately notify the OEE of incidences of misconduct. The OEE will work with the preceptor or director of pharmacy in determining the course of action needed to address the incident. In such cases, the OEE will also file an Incident Report with the Office of the Dean. Please refer to the

School of Pharmacy Handbook for more information regarding the disciplinary process and failed

rotations: <http://www.ndm.edu/files/resources/sopstudenthandbook20152016.pdf>.

Academic Honesty Policy

Students who violate the Intellectual Responsibility and Plagiarism Policy as stated in the 2016-2017 Notre Dame of Maryland University, School of Pharmacy Handbook will be subject to disciplinary action, which may include failure of the course.

Grading & Evaluation

IPPE I and II are graded on a pass/fail scale. Successful completion of all rotation assignments and activities, achievement of the course objectives and a passing grade for professionalism will warrant a passing grade for each IPPE. Failure to pass the professionalism evaluation, despite a passing grade for the competency evaluation will result in failure of the IPPE. In order for students to receive feedback regarding areas of strength and areas for improvement, preceptors will provide students with a mid-rotation evaluation. Students are expected to utilize this feedback to improve in areas noted for improvement. A final evaluation will also be provided to students at the conclusion of each IPPE. **The Office of Experiential Education reserves the right to lower a student's mean professionalism evaluation score if the student does not complete and/or upload all activities and Final Reflection by the last day of the rotation** (e.g. December 1 is last day of the student's IPPE; all work including evaluations **MUST** be done by 8:00am December 1). **Each late day will result in a lowering of the mean professionalism score by 1.0. After three days, a grade of zero will be assigned and result in failure of the Introductory Pharmacy Practice Experience.**

Rotation Evaluations

As part of the quality assurance of the experiential program, rotation evaluations must be completed by the students in e-value. **If the student does not complete the Experiential Education Site and Preceptor Evaluation and Final Reflection by the last day of the rotation** (e.g. December 1 is last day of IPPE; all work including evaluations **MUST** be done by 8:00am on December 1), **each late day will result in a lowering of the mean professionalism score by 1.0. After three days, a grade**

of zero will be assigned and will result in failure of the Introductory Pharmacy Practice Experience.

Evaluations must be done professionally. Evaluations deemed to be unprofessional by the OEE will result in the lowering of the student's professionalism grade which may result in failure of the rotation. Please plan ahead and ensure rotation evaluations are completed on time. Students experiencing technical difficulties should contact the OEE immediately, so issues may be resolved in a timely fashion.

Preceptors will receive student evaluations of the preceptor, site, and overall rotation after precepting at least two students. This data will be accessible in aggregate form and may be viewed at any time.

Safety Policy

Several professional practice experiences will be offered in Baltimore City and its surrounding suburbs. These are urban environments, which require students to be aware of and take responsibility for their safety. Being alert, proactive, and using common sense are ways in which to maintain safety. As with any city environment, using good judgment is always recommended. Listed below are a few safety suggestions to keep in mind during professional practice experiences:

- Locate the security station at each rotation site and keep the phone number on you at all times
- Walk with others (when possible) while entering or leaving a rotation site
- When parked at or near rotation sites, keep all valuables located in your car out of sight
- Avoid isolated and dark areas
- Carry your cell phone and keep it accessible
- When available, use the institution's shuttle service to area parking lots, public transportation, etc.
- Immediately report any violations of safety to the site's security office and to the OEE

Accommodations for Students with Disabilities

Students, who have identified themselves as disabled and have documented their disability, will be provided reasonable accommodations in the course in accordance with section 504 of the Rehabilitation Act and the Americans with Disabilities Act of 1990. If accommodations are required, students with disabilities should identify themselves to the University Disability Support Services Office [410-532-5434], provide the DSS office

with an assessment by an appropriate provider (e.g. medical doctor or licensed psychologist), and present a completed accommodations form from the DSS office to the Assistant Dean of Student Affairs as soon as possible. Course instructors will be notified thereafter. Accommodations will not be provided until documentation is received by the SOP Dean's office.

Sexual Misconduct and Discrimination

"No person in the United States, shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance..." — Title IX of the Education Amendments of 1972, and its implementing regulation at 34 C.F.R. Part 106 (Title IX)

Notre Dame of Maryland University seeks to foster and maintain an atmosphere of mutual respect and concern for all members of the University community. As such, the University does not discriminate against students, faculty or staff based on sex in offering equal access to its educational programs and activities or with respect to employment terms and conditions. Sexual- and gender-based harassment and misconduct, including sexual violence, are a kind of sex discrimination and are prohibited by Title IX and the University.

NDMU is committed to maintaining an environment that is free from discrimination based on sex, and maintains that commitment by responding promptly and effectively when it learns of any form of possible discrimination based on sex. The University responds to reports of sexual harassment, including sexual violence, as part of its efforts to stop the misconduct, prevent its recurrence, and remedy its effects. In compliance with Title IX, the University has Sexual Misconduct and Sexual Harassment policies. (<http://www.ndm.edu/files/resources/ndmu-sexual-misconduct-policy-final-10012016-2.pdf>)

Please contact Dr. Nicole Culhane (410-532-5527; nculhane@ndm.edu) immediately if you have any concerns about the policy or if you suspect or are aware of any potential violation(s).

Inclement Weather Policy

The student should follow the inclement weather policy of the individual practice site. In the event of inclement weather, students must contact their individual preceptor for instructions regarding attendance. Driving conditions may be hazardous and weather conditions will differ in and outside the state, so students must contact the preceptor to determine if they should travel to the site. If the preceptor excuses the student due to weather conditions or if the student believes driving conditions would pose a safety risk, the student must discuss with the preceptor how the time missed will be made up. In addition, students must notify the OEE of the absence within 24 hours.

Requirements for Experiential Training

Students must fulfill the following requirements to meet eligibility requirements for participation in IPPE I and II. Individual sites may have additional requirements that students must complete. Students are responsible to look in e-value under Site Requirements to determine if there are any additional requirements they must complete prior to the first day of rotations. Students are required to contact their preceptor or designated contact person at least **2 weeks** prior to the start of the rotation. Preceptors may provide additional logistical information needed by the students. **It is the student's responsibility to fulfill these requirements. Failure to do so may result in removal from the practice site and thus failure of the rotation.**

Criminal Background Check and Drug Screening

It is common practice for agencies and/or clinical sites to have policies requiring screening and/or criminal background checks for their employees, volunteers, and students who are assigned to the facility. Notre Dame of Maryland University, School of Pharmacy will comply with these requirements in placing students at such facilities or agencies. As a condition for enrollment and continued matriculation in academic programs involving external placements, clinical rotations, internships, or service learning experiences, students are required to participate in a criminal background prior to matriculation. Criminal background checks will be required annually and additional drug screening tests may be required during the professional curriculum. This will be at the discretion of the School of Pharmacy or the agency sponsoring the external placement.

Notre Dame of Maryland University, School of Pharmacy will assist students in understanding and complying with the requirements; however, the responsibility for providing such information and the associated costs rests with the student- not the School of Pharmacy. Failure to submit to such testing or to provide such information as

required as a condition for admission and clinical placement by the designated due dates may result in inability to complete program requirements and/or delay in completion of the program. Similarly, results from the drug screening tests or criminal background check may result in denial of clinical placement and/or disciplinary action on the part of the School of Pharmacy, including, but not limited to disqualification from further studies at the School.

Cardiopulmonary Resuscitation (CPR) Certification and First Aid

Students are required to obtain and maintain CPR certification and First Aid for the healthcare provider from the American Heart Association. The students must upload proof of a current CPR certification to e-value in order to participate in IPPE I and II. If the CPR certification expires before you complete your academic program, you must recertify and a copy of the certification card must be uploaded to e-value. Students will be responsible for the cost of the certification program and all renewals. Students will be required to maintain the CPR certification card and have it in their possession while on experiential learning experiences.

Health Information

As a condition of enrollment, all Doctor of Pharmacy students must maintain and upload to e-value proof of health insurance coverage that includes effective date and renewal date at the beginning of each academic year. If the student is no longer covered under their parents' plan, they may purchase a University-sponsored health insurance plan. Personal health insurance covers illness and injury in the classroom and lab situations as well as any off campus injuries/illnesses.

HIPAA and OSHA Training

Students are required to complete HIPAA and OSHA training and upload certifications to e-value before reporting to the rotation site. Training will be arranged through the OEE through the Pharmacist's Letter Preceptor Training and Resource Network (PTRN). Proof of HIPAA and OSHA training and examination records will be maintained in the OEE.

Immunizations

Students are required to have proof of immunization prior to the start of the Introductory Pharmacy Practice Experiences. Proof of immunization or certificate of

waiver must be uploaded into e-value under *Immuns and Certs*. Required immunizations include tetanus DPT, polio, MMR, Tb test, meningococcal, completion of the hepatitis B vaccine series, Varicella (chicken pox) and influenza. In order to prevent the spread of influenza, documentation of this immunization or proof of contraindication must be submitted seasonally by **October 31st**. Vaccinations are at the student's expense. Students who fail to submit documentation of the required immunizations will not be permitted to participate in the Introductory Pharmacy Practice Experiences.

Individual experiential sites may require additional exams and/or immunizations. Please refer to e-value for site specific immunization requirements at least **one month** prior to the start of your first rotation. These immunizations are at the student's expense.

Students failing to submit appropriate documentation will not be permitted to report to the practice site and thus may result in failure of the rotation.

Student Professional Liability Insurance

Students are required to carry student professional liability insurance through the group School policy. This insurance premium is included in student fees and is renewed on an annual basis. This policy covers students during all approved IPPE and APPE experiences while in the program. The policy also requires appropriate student supervision while in the experiential setting.

Transportation and Housing

It is the student's responsibility to assure that he/she has appropriate arrangements for transportation to and from rotation sites throughout the curriculum. Rotations begin in the first semester of the professional program. Transportation is not provided by the School. Students are not considered an agent or an employee of the University and are not insured for any accidents or mishaps that may occur during any traveling that is done as part of the student's professional program. The School does not guarantee that all required rotations will take place in the Maryland metropolitan area and students may be required to complete rotations in other cities in Maryland or states. Transportation, **parking**, and housing costs are the student's responsibility.

Section Five

Activities

Worksheet # 1

Prescription Processing

Learning objectives

1. List the components of a prescription.
2. List and describe each of the steps involved in processing a prescription.
3. Explain the third party billing process.
4. Discuss the pharmacy's reimbursement model.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Shadow a technician or a pharmacist:

Follow 1 new prescription and 1 refill prescription through all necessary steps involved in prescription processing. Document all activities (including third party billing and automation) during the dispensing process. While going through the steps, please be aware of any systems in place to reduce medication errors and how any problems with the prescription(s) are handled. What strategies are used to free up pharmacist time for direct patient care.

New Prescription

Steps	Person Responsible (title)	Description of Activities
<i>Example: Step 1 – A new prescription is brought to the counter.</i>	<i>Example: Pharmacy technician</i>	<i>Example: Obtain birth date, allergies, and obtain patient information and verify accuracy. (If new patient, add information to computer.) Identify waiting time for patient.</i>

Refill Prescription

Steps	Person Responsible (title)	Description of Activities
<i>Example: Step 1 – A new prescription is brought to the counter.</i>	<i>Example: Pharmacy technician</i>	<i>Example: Obtain birth date, allergies, and obtain patient information and verify accuracy. (If new patient, add information to computer.) Identify waiting time for patient.</i>

1. What is the process for substitutions from brand to generic at your site? Include policies on how the patient is informed.

2. Document at least three prescriptions that included an issue or an error and how it was handled by the pharmacy staff (include any judgment decisions the pharmacist had to make while filling the prescription).

Prescription Item	Describe Error or Issue	How Was Error/Issue Handled?
<i>Example: Amoxicillin for Child</i>	<i>Example: Rx called for large pills</i>	<i>Example: Discussed with parent and physician and had prescription rewritten for liquid form.</i>

3. What are the legal requirements for dispensing medication guides and which medications require them?

4. Reimbursement:

- i. Is your pharmacy reimbursed for Medication Therapy Management (MTM) or any other services? If so, describe the reimbursement process.
- ii. What types of cost savings measures are in place at your site? Are the cost savings beneficial to the pharmacy, the patient, or both?
- iii. Explain the reimbursement process for a prescription. What types of fees are deducted from the reimbursement? Did the pharmacy get paid below or above cost?
- iv. What additional steps are involved when a pharmacy is paid below cost?

Worksheet # 2

Medication List

Learning Objectives

1. List generic and brand names for commonly used medications.
2. List the therapeutic categories of commonly used medications.
3. List and discuss the most common and most serious adverse effects associated with commonly used medications.
4. List and discuss monitoring parameters for efficacy and toxicity for commonly used medications.

Preceptor: Discuss this activity with the student (focus on adverse effects and monitoring parameters) and please sign-off in E-value that it has been accurately completed.

Identify the Top 25 drugs used (fast-movers) at your pharmacy. Complete the chart below with the correct information about the drugs.

Brand Name	Generic Name	Therapeutic Category	Common adverse Effects (include frequency)	Serious adverse effects (include frequency)	Monitoring Parameters (Efficacy/toxicity)

Worksheet # 3

Pharmacy Management

Learning Objectives

1. Describe the organizational structure of the pharmacy and the reporting structure up to the corporate level.
2. Discuss the role of Human Resources in a Community Pharmacy.
3. Discuss and explain how customer service is evaluated in the pharmacy and how the results are used for service improvement.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Human Resource Management

1. Draw the organizational chart (i.e. the reporting structure) for your pharmacy. Start within the pharmacy and progress up to the corporate level.

2. Ask your preceptor how many positions exist within the pharmacy, including all part-time and on-call personnel.

3. Have a discussion with your preceptor about the following:
 - Where is the pharmacy located in the store? What are the pros and cons of the location?
 - What are the daily duties that need to be completed so the pharmacy runs smoothly?
 - How does the preceptor provide feedback when an employee is not performing well?
 - Procedures for handling personnel issues.
 - Training modules offered by your site for new employees and interns. Are they computer based trainings?
 - How is a new policy (from Corporate, Board of Pharmacy, or other legal body) communicated to pharmacy personnel?

4. Explain the importance of customer service in a community pharmacy and describe the mechanisms used to determine quality of service. What specific requirements/policies/procedures regarding customer service are available at your site?

5. Discuss with your preceptor the reports that are generated in the pharmacy daily, weekly, or monthly and list 5 in the table below.

Name of Report	How often is the report generated?	Description of Report	How is it used at this site?

Worksheet # 4

Pharmacy Operations

Learning Objectives

1. Describe policies and regulations regarding pharmacy record keeping.
2. Describe policies and regulations regarding medication inventory (frequency and information obtained).
3. Describe policies and regulations regarding medication storage in and out of the pharmacy.
4. Describe procedure for ordering and purchasing.
5. Describe the security measures in place at your pharmacy.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Record Keeping

1. Describe the record keeping process at your pharmacy
 - i. Where are medication orders filed and stored (including controlled substance)? If electronically stored, what is the pharmacy's contingency plan in the event of lost data?
 - ii. How are the medications organized in the pharmacy?

Inventory Management

1. Participate in the following:
 - o Send an order including an electronic or paper DEA 222 form
 - o Order check in and shelving
2. Explain how to complete a DEA 222 form when buying, supplying, and returning product. Where is each copy of the DEA 222 form stored or sent?
3. Describe the procedure for ordering medications at your pharmacy
 - a. How is this process different for controlled substances

4. Describe the procedure for returning medications including controlled substances.

5. Describe pharmacy's inventory control system including controlled substances.

6. How are expired medications handled at your pharmacy?

7. What is the procedure for handling back orders or medication shortages?

8. How are recalls on medications handled at your pharmacy?

Medication storage

1. Using the table below, identify medications with unique storage requirements or routes of administration. Choose 2 medications that are not stored at room temperature and 2 medications that are not given orally.

Drug	Route of administration	Storage requirement	For routes other than oral, how does the pharmacy ensure that the patient receives education about route of administration	Why must this medication be stored this way?

Security

1. How is the pharmacy secured (gates, alarm systems, etc.)?
2. Describe the process for opening and closing the pharmacy (from a security standpoint).
3. How are relief pharmacists handled at your pharmacy (from a security standpoint)?
4. Ask your preceptor to describe any concerns or issues they see with the current security of the pharmacy.

Worksheet # 5

Drug Information

Learning Objectives

1. List all of the reference materials that are available in your pharmacy, classify the type of reference, explain the primary function of the reference, and identify if the reference is available electronically and/or hard copy.
2. Use Watanabe's systematic approach to drug information in responding to drug information questions.
3. Utilize the most appropriate references in responding to drug information requests.
4. Utilize appropriate communication skills to respond to the drug information question verbally and in writing.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been completed.

Drug Information References

Create a table of drug information references available at your pharmacy. Add additional space if necessary.

Reference Name	Primary use	Identify if it is Primary, Secondary, Tertiary	Available electronically or hard copy (include edition)

Drug Information Questions

During your experience you will need to respond to at least 2 drug information questions. With preceptor guidance, identify two drug information questions; one from a patient and one from a health care provider. Use the references available at your pharmacy first; and if you cannot find the information, use the information references available to you through the school library. Indicate whether the reference was available in the pharmacy or the library in your write-up.

In addition, use the Drug Information Request and Response Form to complete each of your drug information questions. Your preceptor must review your drug information response prior to reporting your answer to the requestor.

Drug Information Request and Response Form

Date of DI request:

Responder (name, title):

Demographics of requestor (3 points):

Name: Age: Sex:	Consumer: Health Professional: Pharmacist <input type="checkbox"/> Physician <input type="checkbox"/> Nurse <input type="checkbox"/> Other _____	Contact Information: Phone#: e-mail:	
Initial question from the requestor (2 pts): 			
Background information / questions (10 pts, information to ask or would like answered before searching): 			
Ultimate question to answer (5 pts, if background questions cannot be asked or answered, use the initial question here) 			
Question classification(s) (5 pts, circle the most appropriate)			
Adverse drug reaction	Drug interaction	Compatibility	Dosage or regimen
Drugs in lactation	Formulation	Indication	Identification
Pediatrics	Pharmacology	Pharmaceutics	Pharmacokinetics
Stability	Teratogenicity	Therapeutics	Toxicology
Nonprescription drugs	Complementary and alternative medicine	Cost	Geriatrics
Other (must exclude any of the above categories): 			

Search strategy (20 pts: List in the order of your search and type(s) of literature based on the classification above; mark its usefulness (+ = useful, - = not useful)):

Analysis & evaluation of the information (35 pts: Cite, analyze, and critically evaluate pertinent literature/reference found in the previous section):

Response: (20 points: Write an accurate response and draw appropriate conclusions from the literature evaluation, based on either the patient, the requestor, or both).

3. Describe the steps within normal workflow the pharmacy has implemented to prevent medication errors.
 - i. What is the pharmacist's and technician's role in preventing medication errors?
 - ii. Give an example of a time when workflow changed in the pharmacy due to a medication error that occurred.
 - iii. Can you describe steps that may be helpful for the pharmacy to implement for medication error prevention?

Adverse Drug Reactions

1. Describe the requirements of the FDA MedWatch and VAERS (Vaccine Adverse Event Reporting System).
2. How are ADR's reported at your pharmacy? What are some advantages and disadvantages of the reporting system?
3. Give an example of an ADR that was reported in your pharmacy.

Regulatory Agencies

1. What is the primary role and responsibility of the following agencies in terms of regulating the pharmacy AND the role of the pharmacist in assuring compliance with standards?
 - a. Maryland Board of Pharmacy

 - b. Maryland State Department of Health

 - c. Drug Enforcement Agency

2. How often and when do inspections by these regulatory agencies occur?

Mock Maryland Board of Pharmacy Inspection

1. Assume the role of a State Board of Pharmacy Inspector and conduct a mock Board of Pharmacy inspection at your pharmacy. Utilize the Community Pharmacy Inspection Form:

<http://dhmh.maryland.gov/pharmacy/docs/BOP-Forms/Community%20Inspection%20Form.pdf>

Complete the inspection, discuss you findings with your preceptor and provide him/her with a copy and maintain one copy for your records. You do not need to upload this to E-Value.

2. Ask your preceptor if you can compare your findings with a copy of an actual Maryland Board Inspection.

Worksheet # 7

Cultural Awareness

Learning Objectives

1. Utilize the Kleinman explanatory model to illicit a patient's description of their illness.
2. Utilize the concepts of varying health belief models in providing patient care.
3. Identify strategies for managing patients with financial and language barriers.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

1. Describe the patient population that the pharmacy serves in terms of ethnicity, socioeconomic status, language, and age.

2. Discuss with your preceptor how he or she deals with cultural barriers in their practice.

3. Utilize the Kleinman explanatory model approach (you may need to refer to page 260 in "When the spirit catches you, you fall down") to solicit information from a patient when assisting them with self-treatment. Document the conversation in response to the questions below and document the outcome of your interaction.

What do you call the problem?

What do you think the illness does?

What do you think the natural course of the illness is?

What do you fear?

Why do you think this illness or problem has occurred?

How do you think the sickness should be treated?

How do you want us to help you?

Who do you turn to for help?

Who should be involved in decision making?

Outcome of Interaction:

4. Describe how the patient's health beliefs (patient in question number 3) influenced his/her perception of illness and your ability to provide care.

Worksheet # 8

Health Literacy

Learning Objectives

1. Evaluate a patient's health literacy using a standardized tool.
2. Assess health literacy awareness and communication in a community pharmacy.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Required Reading:

Pfizer's The Newest VitalSign toolkit:

http://www.pfizer.com/files/health/nvs_flipbook_english_final.pdf

1. Utilizing the Newest Vital Sign toolkit evaluate you own health literacy by evaluating a nutrition label. Attach the scoring sheet to this activity.

2. Utilizing The Newest VitalSign toolkit provided to you, evaluate the health literacy of at least **1** patient when picking up a prescription. Attach the scoring sheet to this activity.

3. Based on the health literacy of your patient (from question above), what recommendations can you make for the pharmacy in order to enhance health literacy awareness and communication to this patient population? Discuss recommendations with your preceptor.



Dear Healthcare Professional:

Thank you for your interest in the Newest Vital Sign (NVS), the first tool available to assess health literacy in English and Spanish.

Research shows that patients with low health literacy are less likely to comply with prescribed treatment and medical instructions from their physician. Identifying patients who are at risk for low health literacy allows physicians to apply specific clear health communication techniques that may enhance understanding. The Newest Vital Sign is a simple and fast way to identify those patients. The tool, which tests literacy skills for both numbers and words*, has been validated against a previously validated measure of health literacy (the TOFHLA), and has been shown to take approximately three minutes to administer.

In addition to the NVS tool, we are also including information to help enhance patient-provider communication. In this folder you will find the following materials:

- NVS Tool (nutrition label and scoring sheet tear-off pad, both two-sided in English/Spanish)
- NVS Implementation Guide
- *Ask Me 3* (fact sheet on free educational materials from the non-profit Partnership for Clear Health Communication)
- *Help Your Patients Succeed* (tips for improving communication with your patients)
- *Why Does An Ice Cream Label Work . . .* (fact sheet explaining the design of the NVS)

The Newest Vital Sign is Pfizer Inc's most recent contribution to the health literacy movement. For more than nine years, Pfizer has been committed to raising awareness of developing solutions for low health literacy. The overall goal of our Clear Health Communication Initiative is to positively impact the health care system by enhancing patient-provider communication to increase compliance and improve patient health outcomes.

The Newest Vital Sign and companion materials are available to medical and public health providers at no cost. To learn more about our efforts to improve health literacy, please visit www.pfizerhealthliteracy.com.

Sincerely,

Richard C. Hubbard, M.D.
Senior Director, External Medical Affairs
Pfizer Inc

*Literacy is defined as the understanding and application of words (prose), numbers (numeracy), and forms, etc. (document).



Implementation Guide for the Newest Vital Sign

Health literacy— the ability to read, understand and act upon health information — is now known to be vital to good patient care and positive health outcomes. According to the Institute of Medicine’s groundbreaking report on health literacy, nearly half of all American adults — 90 million people — have difficulty understanding and using health information. When patients lack the ability to understand and act upon medical information, it can put their health at risk.

The Newest Vital Sign is a new tool designed to quickly and simply assess a patient’s health literacy skills. It can be administered in only 3 minutes and is available in English and Spanish. The patient is given a specially designed ice cream nutrition label to review and is asked a series of questions about it. Based on the number of correct answers, health care providers can assess the patient’s health literacy level and adjust the way they communicate to ensure patient understanding.

There are many ways to integrate the Newest Vital Sign (NVS) into a private practice or clinic setting to improve communication with patients. Improved communication can help increase your patients’ ability to understand and act upon the information you provide; ultimately improving patient satisfaction and health outcomes.

How To Use the Newest Vital Sign

1. Who and when to administer the Newest Vital Sign.

- **A nurse (or other trained clinic staff)** is the preferred administrator of the Newest Vital Sign.
- Administer at the same time that other vital signs are being taken.

2. Ask the patient to participate.

A useful way to ask the patient is an explanation similar to this:

“We are asking our patients to help us learn how well patients can understand the medical information that doctors give them. Would you be willing to help us by looking at some health information and then answering a few questions about that information? Your answers will help our doctors learn how to provide medical information in ways that patients will understand. It will only take about 3 minutes.”

3. Hand the nutrition label to the patient.

The patient can and should retain the nutrition label throughout administration of the Newest Vital Sign. The patient can refer to the label as often as desired.

More...

4. Start Asking the 6 questions, one by one, giving the patient as much time as needed to refer to the nutrition label to answer the questions.

- There is no maximum time allowed to answer the questions. The average time needed to complete all 6 questions is about 3 minutes. However, if a patient is still struggling with the first or second question after 2 or 3 minutes, the likelihood is that the patient has limited literacy and you can stop the assessment.
- **Ask the questions in sequence.** Continue even if the patient gets the first few questions wrong. However, **if question 5 is answered incorrectly, do not ask question 6.**
- **You can stop asking questions if a patient gets the first four correct.** With four correct responses, the patient almost certainly has adequate literacy.
- **Do not prompt patients who are unable to answer a question.** Prompting may jeopardize the accuracy of the test. Just say, “Well, then let’s go on to the next question.”
- **Do not show the score sheet to patients.** If they ask to see it, tell them that “I can’t show it to you because it contains the answers, and showing you the answers spoils the whole point of asking you the questions.”
- **Do not tell patients if they have answered correctly or incorrectly.** If patients ask, say something like: “I can’t show you the answers till you are finished, but for now you are doing fine. Now let’s go on to the next question.”

5. Score by giving 1 point for each correct answer (maximum 6 points).

- **Score of 0-1** suggests high likelihood (50% or more) of limited literacy.
- **Score of 2-3** indicates the possibility of limited literacy.
- **Score of 4-6** almost always indicates adequate literacy.

Record the NVS score in the patient’s medical record, preferably near other vital sign measures.

Best Practices for Implementation: Summary

- A nurse (or other trained clinic staff) is the preferred administrator of the Newest Vital Sign.
- Administer the NVS at the same time that the patient’s other vital signs are being taken.
- Record the NVS score in the patient’s chart, preferably near other vital sign measures.
- Tailor communication to ensure patient understanding.



Why Does an Ice Cream Label Work as a Predictor of the Ability To Understand Medical Instructions?

A patient's ability to read and analyze any kind of nutrition label requires the same analytical and conceptual skills that are needed to understand and follow a provider's medical instructions. The skills, which are known as *health literacy*, are defined as the understanding and application of words (prose), numbers (numeracy), and forms (documents).

The use of an ice cream label is especially relevant as recent research in the *American Journal of Preventive Medicine* (November 2006) has shown that poor comprehension of food labels correlated highly with low-level literacy and numeracy skills. However, the study found that even patients with better reading skills could have difficulties interpreting the labels.

Whether reading a food label or following medical instructions, patients need to:

- remember numbers and make mathematical calculations.
- identify and be mindful of different ingredients that could be potentially harmful to them.
- make decisions about their actions based on the given information.

PROSE LITERACY:

Clinical example: The patient has scheduled some blood tests and is instructed in writing to fast the night before the tests. The skill needed to follow this instruction is **Prose Literacy**.

Ice cream label example: The patient needs this skill to read the label and determine if he can eat the ice cream if he is allergic to peanuts.

NUMERACY:

Clinical example: A patient is given a prescription for a new medication that needs to be taken at a certain dosage twice a day. The skill needed to take the medication properly is **Numeracy**.

Ice cream label example: The patient needs this same skill to calculate how many calories are in a serving of ice cream.

DOCUMENT LITERACY:

Clinical example: The patient is told to buy a glucose meter and use it 30 minutes before each meal and before going to bed. If the number is higher than 200, he should call the office. The skill needed to follow this instruction is **Document Literacy**.

Ice cream label example: The patient needs this skill to identify the amount of saturated fat in a serving of ice cream and how it will affect his daily diet if he doesn't eat it.

Nutrition Facts

Serving Size ½ cup
Servings per container 4

Amount per serving

Calories 250 Fat Cal 120

%DV

Total Fat 13g 20%

Sat Fat 9g 40%

Cholesterol 28mg 12%

Sodium 55mg 2%

Total Carbohydrate 30g 12%

Dietary Fiber 2g

Sugars 23g

Protein 4g 8%

*Percentage Daily Values (DV) are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Ingredients: Cream, Skim Milk, Liquid Sugar, Water, Egg Yolks, Brown Sugar, Milkfat, Peanut Oil, Sugar, Butter, Salt, Carrageenan, Vanilla Extract.

Score Sheet for the Newest Vital Sign Questions and Answers

READ TO SUBJECT:

This information is on the back of a container of a pint of ice cream.

1. If you eat the entire container, how many calories will you eat?
Answer: 1,000 is the only correct answer

2. If you are allowed to eat 60 grams of carbohydrates as a snack, how much ice cream could you have?
Answer: Any of the following is correct: 1 cup (or any amount up to 1 cup), half the container. Note: If patient answers "two servings," ask "How much ice cream would that be if you were to measure it into a bowl?"

3. Your doctor advises you to reduce the amount of saturated fat in your diet. You usually have 42 g of saturated fat each day, which includes one serving of ice cream. If you stop eating ice cream, how many grams of saturated fat would you be consuming each day?
Answer: 33 is the only correct answer

4. If you usually eat 2,500 calories in a day, what percentage of your daily value of calories will you be eating if you eat one serving?
Answer: 10% is the only correct answer

READ TO SUBJECT:

Pretend that you are allergic to the following substances: penicillin, peanuts, latex gloves, and bee stings.

5. Is it safe for you to eat this ice cream?
Answer: No

6. (Ask only if the patient responds "no" to question 5): Why not?
Answer: Because it has peanut oil.

ANSWER CORRECT?

yes	no

Number of correct answers:

Interpretation

Score of 0-1 suggests high likelihood (50% or more) of limited literacy.

Score of 2-3 indicates the possibility of limited literacy.

Score of 4-6 almost always indicates adequate literacy.

Ethics

1. Ask your preceptor to describe an ethical situation or decision they have encountered throughout their career.
 - i. Describe the situation and how your preceptor handled the situation. Include the rationale and thought process that the preceptor went through during the process of deciding how to handle the situation. How would you have handled the same situation? Discuss this with your preceptor.

2. A patient presents to your pharmacy with a prescription that you suspect to be forged or you have concerns about abuse:
 - i. What is the policy at your site if a prescription is suspected or confirmed as a forgery?

 - ii. Can you refuse to fill the prescription from a legal standpoint and from an ethical standpoint?

 - iii. List two items that would be “red flags” that would cause a pharmacist to suspect forgery or abuse.

 - iv. Explain the function of the Chesapeake Regional Information System for our Patients (CRISP) web portal: <https://crisphealth.org/CRISP-HIE-SERVICES/Prescription-Drug-Monitoring-Program-PDMP>
How does CRISP support the pharmacist with concerns of patient drug abuse or prescription forgeries?

Communication

Part 1: During the course of your rotation observe and document interactions between the individuals noted below. Pay particular attention to verbal and nonverbal communication. Discuss your observations and your thoughts regarding how these interactions either support or hinder the development of teamwork.

- Pharmacist – technician
- Pharmacist – clerk
- Pharmacist – store manager/pharmacy manager
- Other: _____

1. Were there any barriers to the communication?

2. How could the communication interaction have been improved?

Part 2: Discuss with your preceptor and provide written responses to the following questions:

1. What challenges has the pharmacist encountered when he/she manages/supervises members of the pharmacy team who are from multiple generations? (Please include older and younger)

Worksheet # 10

Durable Medical Equipment

Learning Objectives

1. Define DME and identify common durable medical equipment (DME) sold in pharmacies.
2. List medical conditions for which DME may be warranted.
3. Understand how DME can be billed to and paid for by insurance companies.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

1. List 5 examples of DME sold in your pharmacy and identify the medical condition for which it is used.

DME	Medical condition

2. Discuss how DME is billed to insurance companies. How does reimbursement for DME compare to reimbursement for medications?
3. Ask your preceptor why the pharmacy sells DME. Identify the approximate % of patients that utilize DME equipment and what approximate % of revenue comes from DME (e.g. does DME make the pharmacy money, break even, or cost the pharmacy money).
4. Does your pharmacy provide any specialty DME products (i.e. Breast Pumps, etc.)?
5. What does it mean to accept assignment with Medicare Part B?

Worksheet # 11

OTC Consultation

Learning Objectives

1. Obtain needed information from patients using the QuEST/SCHOLAR technique.
2. Determine appropriate therapy for the treatment of cough, cold and/or allergy.
3. Educate patients regarding medications for the treatment of the common cold.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Instructions: After shadowing your preceptor conducting an OTC consult, conduct your own OTC consult and assess a patient about the current complaint utilizing the QuEST/SCHOLAR technique.

QuEST/SCHOLAR Technique

Step 1:

Quickly and Accurately Assess the Patient

Ask about the current complaint using SCHOLAR

SCHOLAR questions	Patient response
<u>Symptoms</u> What are the main and associated symptoms	
<u>Characteristics</u> What is the situation like? Is it stable or changing?	
<u>History</u> What have you done so far to relieve the symptoms?	
<u>Onset</u> When did the condition start?	
<u>Location</u> What is the precise location of the problem or symptoms?	
<u>Aggravating Factors</u> What (if anything) makes it worse?	
<u>Remitting factors</u> What (if anything) makes it better?	
<u>Other pertinent questions</u> Concurrent medications and other products; Coexisting medical conditions	

Step 2:

After discussing the patient responses with your preceptor, document the following:

QuEST Questions	Student Pharmacist Response
<p>Establish whether the Patient is an Appropriate Self-Care Candidate</p> <ul style="list-style-type: none">○ No severe symptoms○ No symptoms that persist or return repeatedly○ No self-treating to avoid medical care	
<p>Suggest Appropriate Strategies for Treatment</p> <ul style="list-style-type: none">○ Medication (include name, dosage, duration of treatment)○ Alternative Treatments○ General care measures	
<p>Talk with The Patient</p> <ul style="list-style-type: none">○ Review medication actions, administration, and adverse effects○ Explain what to expect from treatment○ Provide information about appropriate follow-up	

Step 3:

Document the interaction above using SOAP format to the best of your ability.

S:

O:

A:

P:

Step 4:

Call the patient in approximately 3 days to follow-up on your recommendation. Assess the following:

1. Efficacy – are the patient’s symptoms improving on the OTC product? Is the patient experiencing any new symptoms?
2. Safety (Adverse effects) – is the patient tolerating the OTC product?
3. Adherence – is the patient taking the OTC product as per instructions on the label? Does the patient need to be referred to their primary care provider?

Worksheet # 12

OTC Product Comparison

Learning Objectives

1. Identify the different products within a class of Over-the-Counter (OTC) medications and alternative therapies.
2. Compare and contrast products within a class of OTC medications and alternative therapies and discuss advantages and disadvantages of each.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Step 1:

Ask your preceptor for the products they usually recommend from the following OTC categories: cough/cold/allergy, anti-diarrheals, constipation, alternative therapies for menopause (hot flashes) and lowering cholesterol. List below and be sure to include this product when completing step 2 below.

Step 2:

Complete this table by going through the aisles in the pharmacy. Identify at least 2 products that have different active ingredients or a different combination of active ingredients.

OTC class #1: Cough/Cold/Allergy

OTC Product (complete brand name)	Therapeutic Use	Active ingredients(s)	Common side effects (3)	Drug Interactions	Recommended time of usage before referral is necessary

Compare and contrast the products listed in the table relative to the advantages and disadvantages of each product. Refer to the required reading.

(Scolaro KL. Disorders related to colds and allergy. Chapter 11. In: Rosemary R. Berardi, et al., eds. Handbook of Nonprescription Drugs. 16th ed. Washington D.C. American Pharmacists Association, 2009)

OTC class #2: Anti-Diarrheals

OTC Product	Therapeutic Use	Active ingredients(s)	Common side effects (3)	Drug Interactions	Recommended time of usage before referral is necessary

Compare and contrast the products listed in the table relative to the advantages and disadvantages of each product. Refer to the required reading.

(Walker PC. Diarrhea. Chapter 17. In: Rosemary R. Berardi, et al., eds. Handbook of Nonprescription Drugs. 16th ed. Washington D.C. American Pharmacists Association, 2009)

OTC class #3: Constipation

OTC Product Name	Therapeutic Use	Active ingredients(s)	Common side effects (3)	Drug Interactions	Recommended time of usage before referral is necessary

Compare and contrast the products listed in the table relative to the advantages and disadvantages of each product. Refer to the required reading.

(Curry CE, Butler DM. Constipation. Chapter 16. In: Rosemary R. Berardi, et al., eds. Handbook of Nonprescription Drugs. 16th ed. Washington D.C. American Pharmacists Association, 2009)

Alternative Product #1: Cough and Cold

OTC Product Name	Therapeutic Use	Active ingredients(s)	Common side effects (3)	Drug Interactions	Recommended time of usage before referral is necessary

Compare and contrast the products listed in the table relative to the advantages and disadvantages of each product.

Alternative Product #2: Osteoarthritis

OTC Product Name	Therapeutic Use	Active ingredients(s)	Common side effects (3)	Drug Interactions	Recommended time of usage before referral is necessary

Compare and contrast the products listed in the table relative to the advantages and disadvantages of each product.

Worksheet # 13

Health Promotion and Wellness

Learning Objectives

1. Determine relevant health promotion and wellness activities on the basis of the patient population served by the pharmacy.
2. Design and implement a pharmacy-based health promotion and wellness event.

Preceptor: This activity will be discussed with the student during on campus discussions in addition to the preceptor discussion. Please sign-off in E-value that it has been accurately completed.

Instructions: Prior to developing a health promotion and wellness event, it is important to understand the patient population in the community in which the pharmacy resides. Prepare a list of questions you will ask your preceptor about the patient population served. Determine the type of health promotion and wellness event you will plan for the pharmacy on the basis of this discussion (e.g. brown bag, health screening, etc).

During site visit:

1. Document the answers to the questions above after discussion with your preceptor.
2. Create a list of potential wellness events utilizing the information from your discussion with your preceptor that would be appropriate to conduct at your pharmacy.
3. Discuss your list with your preceptor and determine one wellness event that you will plan during your time at the pharmacy and list it below.
4. Develop and document below your marketing plan for the event (e.g. making brochures, flyers for pharmacy windows, etc). Be sure that your plan includes marketing outside of the pharmacy to the surrounding community.

5. Identify the date of the wellness event.

6. Develop a detailed outline of how your wellness event will be conducted (e.g. time frame for event, area in pharmacy, other pharmacy personnel involved, etc).

Post wellness event question:

1. Describe the outcome of the event (How many people did you serve, what did your preceptor think about the event, what was the overall sense of satisfaction from patients, etc?).

2. Identify what went well and what you would change if you had the opportunity to plan another event.

Part 2: Compound at least 2 medications.

Medication being compounded	Include any calculations used in determining quantities for your final product.	What equipment did you use to make the compound?	How long did it take you to complete the dispensing of the compound?	Was this compound covered under third party insurance?	What is the expiration date of this compound? How do you know this?	What condition is this compound being used to treat?

Worksheet # 15

Medication Therapy Management

Learning Objectives

1. Identify the core elements of a successful medication therapy management (MTM) service.
2. Perform an MTM review.
3. Utilizing Hepler and Strand's Pharmaceutical Care Model, identify potential drug related problems when performing an MTM review: <http://www.ashp.org/doclibrary/bestpractices/orgstpharmcare.aspx>.
4. Recommend potential solutions to a patient's drug relation problem.
5. Provide a patient with a personal medication record.
6. Document the MTM review.

Preceptor: Discuss this activity with the student and please sign-off in E-value that it has been accurately completed.

Pre-Site Visit:

Required reading: Medication Therapy Management in Pharmacy Practice: Core Elements of an MTM Service Model. American Pharmacists Association; National Association of Chain Drug Stores Foundation. J Am Pharm Assoc (2003). 2008 May-Jun; 48(3):341-53. (pdf file posted on e-value)

Identify the 5 core elements that should be included in a MTM service:

During Site Visit:

Instructions: Either utilizing a patient profile or conducting a medication history on a patient, perform a MTM review on at least **2** patients. Be sure to use the patient interview criteria, included at the end of this activity, when communicating with a patient. Your preceptor will use the criteria to facilitate discussion and provide you with feedback.

Part 1:

Patient #1:

1. Develop a list of questions that you will need to ask the patient in order to complete your review.

Question List:

2. Once you have as many answers to your questions as you feel you are going to be able to obtain, create a list of drug related problems [e.g. untreated medical condition, therapeutic duplication (patient on 2 drugs unnecessarily for one medical condition)].

Drug related problem(s):

3. After reviewing question #2 with your preceptor, discuss and develop a potential solution for each drug related problem identified.

Drug related problem

Potential Solution

4. Develop a personal medication record and provide it to the patient the next time they visit the pharmacy. Use the form included in the appendix of the MTM article or the cards you used for your P1 IPPE Experience.
5. Document all the steps of the MTM review. Utilize the SOAP format to the best of your ability.

Patient #2:

1. Either utilizing a patient profile or conducting a medication history on a patient, perform a MTM review. Develop a list of questions that you will need to ask the patient in order to complete your review.

Question List:

2. Once you have as many answers to your questions as you feel you are going to be able to obtain, create a list of drug related problems [e.g. untreated medical condition, therapeutic duplication (patient on 2 drugs unnecessarily for one medical condition)].

Drug related problem(s):

3. After reviewing question #2 with your preceptor, discuss and develop a potential solution for each drug related problem identified.

Drug related problem

Potential Solution

4. Develop a personal medication record and provide it to the patient the next time they visit the pharmacy. Use the form included in the appendix of the MTM article or the cards you used for your P1 IPPE Experience.

5. Document all the steps of the MTM review. Utilize the SOAP format to the best of your ability.

6. Identify all billable sources of MTM at your site.

7. Ask your preceptor to participate in MTM training if available.

Worksheet # 16

Patient Counseling

Learning Objectives

1. Educate a patient on a new prescription.
2. Educate a patient regarding proper use of a device.

Preceptor: Evaluation criteria for conducting an appropriate patient interview are included at the end of this activity. Please use the checklist to facilitate discussion with the student and provide the student with feedback. After discussing this activity with the student, please sign-off in E-value that it has been accurately completed.

Part I:

Identify at least **3** new prescriptions, accurately prepare patient counseling information and appropriately counsel the patient on the new prescription utilizing the criteria below. Be sure to use the patient interview criteria at the end of this form when communicating with a patient.

Patient #1:

- a) Identify the name, and state purpose of the medication.
- b) State proper administration of medication regarding dosage, route, frequency, duration, technique, and what to do if missed doses.
- c) Explain expected response to therapy (e.g. you should experience an improvement in symptoms within one day).
- d) State potential adverse effects and pertinent drug interactions. Explain strategies for prevention, identification, and/or management.

Patient #2:

- a) Identify the name, and state purpose of the medication.
- b) State proper administration of medication regarding dosage, route, frequency, duration, technique, and what to do if missed doses.

- c) Explain expected response to therapy (e.g. you should experience an improvement in symptoms within one day).

- d) State potential adverse effects and pertinent drug interactions. Explain strategies for prevention, identification, and/or management.

Patient #3:

- a) Identify the name, and state purpose of the medication.

- b) State proper administration of medication regarding dosage, route, frequency, duration, technique, and what to do if missed doses.

- c) Explain expected response to therapy (e.g. you should experience an improvement in symptoms within one day).

- d) State potential adverse effects and pertinent drug interactions. Explain strategies for prevention, identification, and/or management.

Part 2:

Identify at least 2 devices, accurately prepare patient counseling information and appropriately counsel the patient on the new device utilizing the criteria below. Be sure to use the patient interview criteria at the end of this form when communicating with a patient.

Device #1 (Metered-dose Inhaler)

- a) Identify the device and its use.

- b) State proper steps when appropriately using the device. If applicable, state proper administration of the medication delivered via this device, regarding dosage, frequency, duration, technique, and what to do if missed doses.

- c) Explain expected response to therapy when device is used properly (e.g. you will get a glucose reading in 5 seconds if there is enough blood on the strip).

- d) State potential adverse effects and pertinent drug interactions of the medication delivered via this device, if applicable. Explain strategies for prevention, identification, and/or management.

Device #2 (Nasal Spray or Eye Drop)

- a) Identify the device and its use.

- b) State proper steps when appropriately using the device. If applicable, state proper administration of the medication delivered via this device, regarding dosage, frequency, duration, technique, and what to do if missed doses.

- c) Explain expected response to therapy when device is used properly (e.g. you will get a glucose reading in 5 seconds if there is enough blood on the strip).

- d) State potential adverse effects and pertinent drug interactions of the medication delivered via this device, if applicable. Explain strategies for prevention, identification, and/or management.

PHRD 412 Community IPPE

Final Reflection Assessment Rubric

Final reflections are not graded, but instead reviewed by the Office of Experiential Education for continuous quality improvement.

Final Reflection Questions

Please reflect on your recent IPPE. In your reflection, please address the following:

1. Describe 3 aspects of community pharmacy that you were not aware of prior to rotation and how learning about them changed your view of community pharmacy.
2. How have your assessments improved since midpoint?
3. Identify 3 of your strengths and 3 areas for improvement in community pharmacy practice.
4. At this point in your career, what are your pharmacy career plans and how has your IPPE influenced these plans?

Submission Method: Upload to E-Value by 8:00 am on the last day of your IPPE rotation for review by the Office of Experiential Education.

Final Reflection Requirements and Formatting

- Reflection to be written in formal essay format with introduction, body, and conclusion. Correct spelling and grammar are necessary.
- Introductory paragraph should include the name of your IPPE site, location of the site, and the name of your primary preceptor.
- Reflection should directly and candidly address the stated questions.
- Provide examples to back up your opinions and reflections.
- Not more than 2 pages in length.
 - Double spaced, 11 point font, one inch margins
- Student name and date in upper right hand corner.

Section Six

Assessment Forms

Introductory Pharmacy Practice Experiences Professionalism Assessment

****Evaluate the student based on the Likert scale below. Comments are encouraged for all performance levels, but are REQUIRED for performance levels less than 3 (three). Please note that the student MUST earn a mean score of 2.5 or above (and no individual score below a 2.0) on this professionalism assessment in order to PASS the rotation****

Unacceptable Performance	Needs Improvement	Acceptable Performance	Very Good Performance	Exceptional Performance	NA
1	2	3	4	5	NA
Student does not demonstrate this behavior despite preceptor prompting	Student inconsistently demonstrated this behavior, requires consistent preceptor prompting	Student demonstrated this behavior, minimal preceptor prompting	Student demonstrated this behavior, occasional to no preceptor prompting	Student consistently demonstrated this behavior, does not require preceptor prompting	Not able to assess; either not observed or insufficiently observed

Emotional intelligence (EQ) is a set of emotional and social skills that collectively establish how well we perceive and express ourselves, develop and maintain social relationships, cope with challenges, and use emotional information in an effective and meaningful way. (EQ-i^{2.0})

Emotional Intelligence Elements per EQ-I 2.0	Professionalism Assessment Area	Midpoint Grade	Final Grade
Self-Actualization The ability and tendency to want to grow, to stretch and to strive—to see your full potential, set meaningful goals and work toward your betterment and fulfillment.	<ul style="list-style-type: none"> • Student is self-motivated (is an active learner – seeks knowledge; asks questions, searches for information, takes responsibility for own learning) 		
	<ul style="list-style-type: none"> • Student accepts constructive criticism and modifies behavior if necessary 		
	<ul style="list-style-type: none"> • Student demonstrates a desire to exceed expectations (goes “above and beyond the call of duty”, attempts to exceed minimal standards and requirements for tasks/assignments/responsibilities) 		
Self-Regard The ability and the tendency for you—in light of both your positive and negative	<ul style="list-style-type: none"> • Student demonstrates confidence (acts and communicates in a self-assured manner, yet with modesty and humility) 		
	<ul style="list-style-type: none"> • Student maintains good hygiene and grooming habits 		

qualities—to both like and have confidence in yourself.			
<p style="text-align: center;">Independence</p> <p>Your ability and tendency to be self-directed in your thinking, feeling, and actions—to go at it alone when needed.</p>	<ul style="list-style-type: none"> • Student utilizes time efficiently (allocates and utilizes appropriate amounts of time to fulfill responsibilities; utilizes others' time wisely) 		
	<ul style="list-style-type: none"> • Student is punctual (arrives to practice setting and meetings on time, meets deadlines) 		
	<ul style="list-style-type: none"> • Student takes responsibilities for one's own actions (does not try to blame others for insufficient or untimely work) 		
	<ul style="list-style-type: none"> • Student is reliable, dependable and follows through with responsibilities (can be counted on; if task is left incomplete or problem is left unresolved, student seeks aid) 		
<p style="text-align: center;">Interpersonal Relationships</p> <p>Your ability and tendency to give and receive trust and compassion, and to establish and maintain satisfying personal relationships.</p>	<ul style="list-style-type: none"> • Student is respectful (demonstrates regard for patients, peers, superiors, other personnel and property) 		
	<ul style="list-style-type: none"> • Student is cooperative (non-argumentative; willing and helpful) 		
	<ul style="list-style-type: none"> • Student displays honesty and integrity in all interactions with patients and other health care professionals (truthful and straightforward; behaves in an ethical manner) 		
<p style="text-align: center;">Empathy</p> <p>Your ability and willingness to take notice of and be sensitive to other people's needs and feelings.</p>	<ul style="list-style-type: none"> • Student is non-judgmental (demonstrates an attitude of open-mindedness towards others and situations; does not "stereotype" others or prejudge situations) 		
	<ul style="list-style-type: none"> • Student is compassionate and empathetic (demonstrates appreciation of others' positions; attempts to identify with others' perspectives; demonstrates consideration towards patients and others) 		
<p style="text-align: center;">Social Responsibility</p> <p>Your ability and tendency to cooperate and contribute to the welfare of a larger social system, to have and act in accordance with a social</p>	<ul style="list-style-type: none"> • Social awareness and responsibility (takes responsibility for adapting and providing quality patient care to diverse patient populations) 		

conscience and to show concern for the greater community.			
Impulse Control The ability to resist or delay a drive or temptation to do or say something or to decide too quickly or rashly.	<ul style="list-style-type: none"> • Student is diplomatic (fair and tactful in all dealings with patients, superiors, peers, and other personnel; Avoids inappropriate comments and gestures) 		
	<ul style="list-style-type: none"> • Student displays self-control (thinks through thoughts before speaking; control emotional responses) 		
Stress Tolerance Your ability and tendency to live your life effectively in the face of stress.	<ul style="list-style-type: none"> • Student appropriately handles stress (remains calm, levelheaded, composed in critical or difficult situations) 		
Optimism Your ability and tendency to look at the brighter side of life and to maintain a positive attitude even in the face of adversity. You are hope and are enabled to see the future as a positive, inviting place.	<ul style="list-style-type: none"> • Student leads the profession to promote safe medication use and to improve health care; Student maintains professional competence (advocates for the profession; promotes life-long learning) 		

(adapted from Hammer D. from University of Washington, American Pharmacists Association, American Board of Internal Medicine; Taxonomy of Professionalism, Daniel Brown, AJPE, 2009; Multi-Health Systems Inc. Toronto, ON; 2011; EQ-i^{2.0}, MHS copyright 2011)

I attest that the student has been present at my site for the required amount of time.

Yes No

Midpoint Final Mean Score:

Midpoint Final Comments (PROFESSIONALISM):

Final Mean Score:

Final Comments (PROFESSIONALISM) - If this box is highlighted in red and you are not able to submit this evaluation, this means that the student has received a score <3.0 and comments must be made before submission:

*****Students must PASS (> 2.5 mean score) a professionalism assessment in order to PASS the rotation*****

Introductory Pharmacy Practice Experience I and II Competency Assessment

Evaluate the student utilizing the likert scale below. Comments are encouraged for all performance levels but are **REQUIRED** for performance levels less than 3 (three).

5	4	3	2	1	NA
Exceptional Performance	Very Good Performance	Acceptable Performance	Needs Improvement	Unacceptable Performance	Not able to assess
Student performed the competency exceptionally well and did not require preceptor assistance	Student performed the competency above average with occasional to no preceptor assistance	Student performed the competency at an acceptable level with minimal preceptor assistance	Student attempted but did not achieve competency in all areas. Student consistently needs frequent supervision	Student performance was below expectations and requires constant supervision. Needs significant improvement	Either not observed or insufficiently observed

	Midpoint	Final
Patient Care		
Identify, evaluate, and resolve medication therapy problems.		
Compare and contrast commonly used nonprescription products.		
Compare and contrast the commonly used alternative products.		
Identify, retrieve, and evaluate clinical literature to answer drug information questions.		
Counsel patients regarding drug therapy.		
Document patient care interventions.		
Demonstrate critical thinking skills to facilitate decision making.		
Comments:		
Practice Management and Pharmacy Operations		
Evaluate and fill a prescription in compliance with state and federal laws.		
Discuss the roles and responsibilities of personnel necessary to effectively manage and operate the pharmacy.		

Describe and evaluate the drug distribution process.		
Perform calculations required to compound, dispense and administer medications.		
Explain and participate in inventory management and purchasing including ordering, receiving, storing, and returning merchandise.		
Comments:		
Communication		
Communicates clearly and effectively when interacting with <u>health care professionals</u> using appropriate listening, verbal, and nonverbal communication skills.		
Communicates clearly and effectively when interacting with <u>patients, caregivers, and the public</u> using appropriate listening, verbal, and nonverbal communication skills.		
Communicates clearly and effectively when interacting with <u>health care professionals</u> using appropriate <u>written</u> communication skills.		
Communicates clearly and effectively when interacting with <u>patients, caregivers, and the public</u> using appropriate <u>written</u> communication skills.		
Demonstrates sensitivity to and adjustment of communication based on contextual or cultural factors (<i>shows respect for different backgrounds; treats each person with respect; utilizes tools to assist in communication when available and applicable</i>)		
Comments:		

Please note that the student MUST not earn an individual score below a 2.0 on this competency assessment in order to PASS the rotation.

Comments must be made for a final mean score of < 3.0 in order for the evaluation to be submitted.

Document the activities that could not be completed and/or additional activities below.

Date: _____

Student name: _____

Preceptor Name: _____

Assessment (please circle one): Pass Fail

Experiential Site and Preceptor Evaluation

(to be completed by the student)

Site _____

Phone Number _____

Preceptor _____

E-Mail _____

Title of Experience _____

Date of Evaluation _____

Experiential Site

Type of practice		
Hospital/Inpatient ____	Community Pharmacy Independent ____	Drug Information/Poison Center ____
Hospital/Internal Medicine ____	Ambulatory Care Clinic ____	Managed Care Organization ____
Hospital/Outpatient ____	Long-term Care/Extended Care Facility ____	Industry ____
Community Pharmacy Chain ____		Other ____

Evaluate the experiential site, preceptor, and overall rotation utilizing the following scale:

Agree 3	Partially Agree 2	Disagree 1	Not applicable to this experiential site N/A
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Site Information

Activities, projects, and assignments fulfilled learning objectives of experience	3	2	1	N/A
Expectations and responsibilities were clearly expressed to me at the beginning of the experience	3	2	1	N/A
I had access to necessary patient information (as pertinent for experience)	3	2	1	N/A
I had the opportunity to interact with other health care professionals (as pertinent for experience)	3	2	1	N/A
I had access to necessary reference materials, either hard copy or electronic	3	2	1	N/A
I had an adequate number of patient cases to facilitate my learning (as pertinent for experience)	3	2	1	N/A
I had adequate space to work	3	2	1	N/A
The site and the staff displayed a professional image	3	2	1	N/A
The staff (pharmacists, interns, and technicians) support student interactions and involvement	3	2	1	N/A
Patient-centered care philosophy was evident in practice	3	2	1	N/A
The site provided an environment that facilitated my learning	3	2	1	N/A
Comments:				

Preceptor Information

The Preceptor:

Leadership and Management				
Demonstrated effective managerial and leadership relationships with colleagues	3	2	1	N/A
Recognized his/her own limitations	3	2	1	N/A
Role Model Practitioner				
Served as a role model for me	3	2	1	N/A
Displayed patient care problem solving skills	3	2	1	N/A
Explained clinical reasoning process to me	3	2	1	N/A
Displayed appropriate interpersonal communication skills	3	2	1	N/A
Was approachable	3	2	1	N/A
Was readily available to answer questions and concerns	3	2	1	N/A
Demonstrated high ethical and personal character	3	2	1	N/A
Displayed interest /enthusiasm in teaching	3	2	1	N/A
Displayed strong drug therapy knowledge	3	2	1	N/A
Promotes Self-Directed Learning and Provides Constructive Feedback				
Provided regular and consistent feedback	3	2	1	N/A
Provided constructive feedback	3	2	1	N/A
Discussed written evaluation with me at the midpoint and end of the experience	3	2	1	N/A
Responded to students' specific learning needs	3	2	1	N/A
Made student teaching an important focus of practice	3	2	1	N/A
Treated students as colleagues in training	3	2	1	N/A
Comments:				

Rotation Information

My verbal communication skills were further developed on this rotation	3	2	1	N/A
My written communication skills were further developed on this rotation	3	2	1	N/A
My clinical skills were further developed on this rotation	3	2	1	N/A
I applied what I learned in my didactic coursework on this rotation	3	2	1	N/A
I believe this experience will help me be a better pharmacist	3	2	1	N/A
Comments:				

Rate the overall quality of this practice experience. Excellent ____ Good ____ Fair ____ Poor ____

I would recommend this site to others. Yes ____ No ____

How could this practice experience be improved?

Section Seven

Resources

Experiential Education Absence Request Form

Please submit the completed form to Preceptor for signed approval and upload with signatures to e-value for Experiential Education Director approval at least one week prior to a planned absence OR the day of an absence due to unforeseen circumstances.

Student _____ Date _____
Preceptor _____
Rotation/Site _____

Number of days of absence included in this request: _____

Approval is requested for absence from rotation activities from ___/___/___ through ___/___/___ for the reason indicated below:

REASON FOR ABSENCE:

- _____ Illness
- _____ Death in Family
- _____ Residency Interview (must show copy of invitation to interview to preceptor and OEE)
- _____ Attend Professional Meeting
- _____ Other Explanation: (must be an acceptable reason to preceptor and OEE)

PLAN TO MAKE-UP TIME:

FURTHER REASON FOR ABSENCE CAN BE GIVEN HERE IF EXPLANATION IS REQUIRED.

_____/_____/_____
(Student Signature) (Date)

Approval _____/_____/_____
(Preceptor Signature) (Date)




Email Communication to Director of EE & Upload to E-value _____/_____/_____
(Date)




NOTRE DAME
OF MARYLAND
UNIVERSITY

SCHOOL OF PHARMACY

Pharmacist Care Lab - SOAP Criteria

<p>PPCP</p> <p>Pharmacist Patient Care Process</p> 	<p>Subjective:</p> <ul style="list-style-type: none"> It includes descriptive information that cannot be confirmed by diagnostic tests or procedures It includes information derived from the patient's perspective: Chief Complaint, History of Present Illness, Histories, Allergies, Medication, and Review of Systems 	
	<p>Chief Complaint (CC)</p>	<ol style="list-style-type: none"> Indicate the reason for the visit, as stated by the patient in his own words and may include the patient's symptoms and/or complaints <ul style="list-style-type: none"> <i>Written as a patient quote or as a general reason, but is usually short, consisting of one to two sentences or short phrases</i>
	<p>History of Present Illness (HPI)</p>	<ol style="list-style-type: none"> Summarize the story of present illness accurately and chronologically <ul style="list-style-type: none"> <i>The information is collected DURING the patient interview and is obtained from speaking with the patient</i> <i>It includes pertinent story of the illness and is written as pros in full sentences and paragraph form summarized by the pharmacist in professional language related to chief complaint</i> <i>Summary of the pertinent information varies based on setting:</i> <ul style="list-style-type: none"> <i>Hospital (inpatient)/Long Term Care/Nursing Home: admission reason and major findings or treatments to date</i> <i>Community/Ambulatory Care: major events prior to date of patient being seen in clinic, patient's story</i> <i>E.g. 56 year old male referred to see a clinical pharmacist for diabetes counseling. Patient recently diagnosed with diabetes mellitus type II two weeks with an A1c of 11% and was given a prescription for insulin glargine 20 units SubQ once daily at night time that she was instructed to start today. During interview patient is overwhelmed and states she does not understand how to use her medication.....</i>
	<p>Histories</p>	<ol style="list-style-type: none"> List past medical history List social history List family history List surgical history
	<p>Allergies</p>	<ol style="list-style-type: none"> List medication allergies and reaction List food allergies and reaction
	<p>Medications (derived from patient interview)</p>	<ol style="list-style-type: none"> List patient's current medication to include: Name, Indication, Dosage Strength, Dose, Frequency, Duration, Adherence <ul style="list-style-type: none"> <i>This is usually the home medication list</i>
	<p>Review of Systems (ROS)</p>	<ol style="list-style-type: none"> Identify pertinent findings from the head to toe review of systems
<p>PPCP</p>	<p>Objective:</p> <ul style="list-style-type: none"> It includes information that can be measured or verified objectively 	
		<ol style="list-style-type: none"> Identify Vital signs Identify pertinent Physical Exam findings Identify Mental Status Exam findings (if available) Identify pertinent labs and other tests (Laboratory tests, POCT, Imaging)
	<p>Medications (derived from medical record)</p>	<ul style="list-style-type: none"> Identify patient's current medication to include: Name, Indication, Dosage Strength, Dose, Frequency, Duration, Adherence <ul style="list-style-type: none"> <i>Hospital setting should have two medication lists: Home medications (entered under subjective) and Inpatient medications (entered under objective)</i>

PPCP	Assessment:
	<ul style="list-style-type: none"> It includes the pharmacist's evaluation of the collected subjective and objective information The assessment justifies and provides the framework for the pharmacist's plan of action and recommendation It includes: Problem ID, Evaluation Summary, Goals of Therapy, Potential Treatment Options, Non-Pharmacologic Options

	Problem ID and Prioritize	<ol style="list-style-type: none"> Identify the most important or acute disease state problem (e.g. Hypertension, Diabetes mellitus type II, and Urinary Tract Infection) <ul style="list-style-type: none"> Community/Ambulatory Care: can consider reason for pharmacist referral as the first problem List the patient's identified health related problems in order of decreasing priority 					
	Evaluation and Summarize	Interpret, evaluate, and summarize pertinent information related to specific Problem ID identified above					
		Subjective	Objective	Risk Factors/Cause/Etiology	Severity of Problem ID	Disease state status	Appropriateness of current treatment
		1. Identify and interpret pertinent CC/HPI/ROS related to specific problem ID being addressed	2. Identify and interpret pertinent histories, medications, vitals, labs, imaging related to specific problem ID being addressed	3. Identify any risk factors/etiology/triggers specific to the patient that puts him/her risk for problem ID/disease	4. Classify disease stage or severity based on guidelines (e.g. stage I, II, III) Mild/Moderate/Severe	5. Summarize the current status of the disease state: e.g. Resolved/Worsening Subtherapeutic/Supratherapeutic Stable/Unstable Controlled/Uncontrolled Improved/Unimproved	6. Assess the appropriateness of the current regimen <i>Consider the following when assessing the appropriateness of the current treatment</i> <ul style="list-style-type: none"> Medication related Problem ID (No indication, inappropriate: indication, dose, frequency, route, dosage form, Therapeutic duplication, Drug allergy or intolerance, Adverse drug event, Drug Interactions (Drug-Drug/Drug-Disease/Drug-Nutrition/Drug-Laboratory), Contraindication) Patient related Problem ID (Patient understanding/knowledge of medication, Adherence, Cost barriers, Health literacy)
	Goals of therapy	<ol style="list-style-type: none"> Identify goals of therapy <ul style="list-style-type: none"> The goals of therapy should follow national guidelines and follow the principle of evidenced-based medicine Document goals of therapy for continuity of care with progression toward achievement of that goal Identify all goals objectively: E.g. According to AHA guidelines, goal A1c is 					
	Potential treatment options	<ol style="list-style-type: none"> Identify all potential pharmacotherapy treatment options (can be identified by drug class) based on guidelines and include references when possible <ul style="list-style-type: none"> E.g. According to AHA guidelines, first line therapy for the treatment of x is drugs y and z Give rationale/justification on why you would make changes or recommend one regimen vs another or continue current therapy based on patient/medication/disease state factors <ul style="list-style-type: none"> E.g. Based on patient's CrCl, drug X would not be appropriate based on limited clearance and increased risk of toxicity. Instead, would consider drug y based on no need for renal dosage adjustment\ Answer any Pharmaceutical Science Questions (Appendix I) as designated by faculty 					
Non-pharmacologic options	<ol style="list-style-type: none"> Identify all potential non-pharmacologic treatment options based on guidelines and include references when possible <ul style="list-style-type: none"> Consider: diet restrictions, patient support programs, physical activity Give rationale/justification on why you would make changes, recommend one option vs another, or continue current non-pharmacologic therapy based on patient/medication/disease state factor 						

PPCP	Plan:
	<ul style="list-style-type: none"> It will include a complete and specific documentation of all recommendations related to Problem ID It will include: all pharmacological and non-pharmacological recommendations, monitoring, patient education, follow-up and referrals

	Treatment plan	<ol style="list-style-type: none"> Create a patient-centered plan in regards to medication therapies <ul style="list-style-type: none"> Use the following action words: Initiate/Discontinue/Continue/Restart/Hold regarding the medication plan For medication recommendations, always include dosage strength, dose, route, frequency, and duration of therapy List who you will contact to make recommendations if applicable (patient/provider/case manager/caregiver ect.) Create a patient-centered plan in regards to non-pharmacologic therapies
	Monitor	<ol style="list-style-type: none"> Create a complete efficacy monitoring plan for each medication and/or the disease <ul style="list-style-type: none"> Efficacy: Include: all objective labs that are associated with helping assess goals of drug and disease state therapy are met; signs and symptoms associated with resolution or improvement of disease state Create a complete safety monitoring plan for each medication <ul style="list-style-type: none"> Safety: Include all objective labs, signs, and/or symptoms related to associated adverse effects of medication
	Counseling/Education	<ol style="list-style-type: none"> Summarize the key points of the interventions made during this encounter <ul style="list-style-type: none"> Highlight any new medications, medications that were changed, or medications that were discontinued Describe the following counseling points: <ol style="list-style-type: none"> Identify the name (generic and brand) of the medication State the purpose/indication of the medication in terms the patient can understand Describe the dose and frequency and how to take the medication State the expected duration of therapy Describe what to do if patients missed a dose List the common adverse effects Explain proper storage requirements If medication device, describe the specific steps for device use education Explain the important monitoring parameters for efficacy for the disease/medication <ol style="list-style-type: none"> Explain to patient what symptoms and signs will improve by adhering to the plan and when to follow up if the plan is not effective Explain the important monitoring parameters for safety for medications <ol style="list-style-type: none"> Explain the potential adverse effects and any drug interactions, discuss the strategies for prevention/identification/management <p>**If counseling already occurred, also document information related to patient understanding of counseling</p>
	Follow-up	<p>Create a complete plan for follow-up for the problems addressed:</p> <ol style="list-style-type: none"> List when, what, and who you will follow-up with based on your plan <ul style="list-style-type: none"> Choose follow-up timelines based on guidelines and/or acuity <ul style="list-style-type: none"> E.g. Community/Ambulatory setting: 2-4 weeks vs Hospital setting: daily if hospitalized or within 1 week of hospital discharge Examples of "who" to follow up with may include: provider, case manager, patient, or caregiver of patient based on plan Describe if referral to another provider is required and provide the rationale